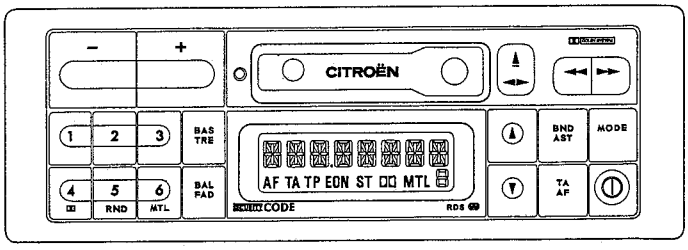
Cassette Car Radio 22DC594/35X



For repair information of the Cassette deck see Service Manual No 4822 725 24637 of Auto Cassette Deck P6-29/3

5024

Service Manual

12 V

Contents **page**

Controls	2
Connections	3
Technical Data - Chips handling	3a
Security code - Display test	4
IC91 module features	4a
Semiconductors - IC pinnings	5 - 5a
Block Diagram	6 - 6a
Connector block - Checks and alignments	7 - 7a
Front schematic diagram	8 - 8a
Front PWB layout	9
Startup - DC voltages	10
Microcontroller part schematic diagram	11 - 11a
Technician's remarks - Tuner part schematic diagram	12 - 12a
Main PWB layout	13 - 13a - 16 - 16a
Sound process part schematic diagram	14 - 14a
Power supply part schematic diagram	15 - 15a
Tape part schematic diagram	17 - 17a
Power amplifier part schematic diagram	18 - 18a
Exploded view	19 - 19a
Electrical partslist	20 - 20a - 21 - 22

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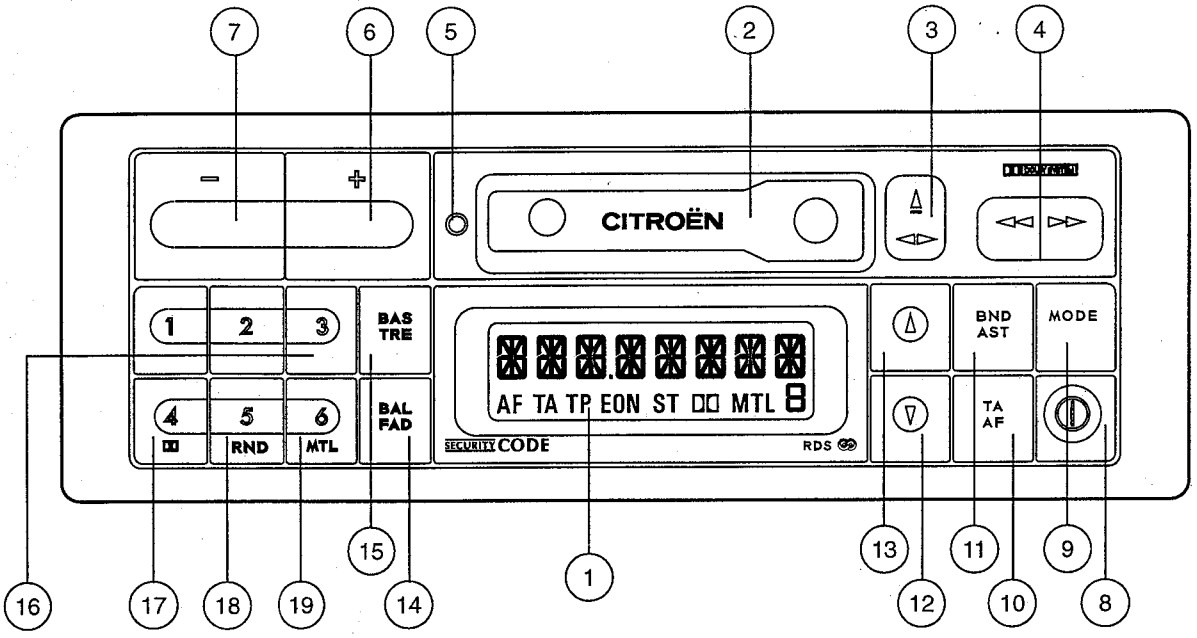
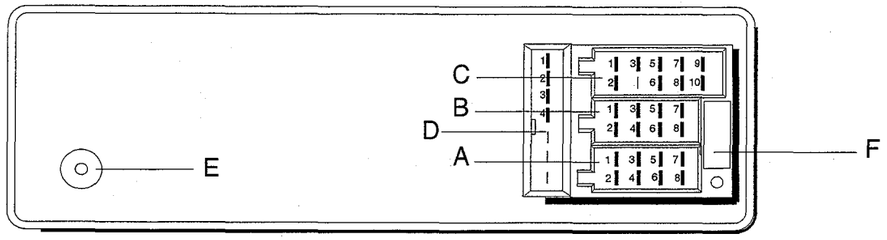
PCS 86 719

CONTROLS



1	DISPLAY	11	SEL NEXT BAND
2	CASSETTE OPENING		AUTOSTORE
3	EJECT / REVERSE BUTTON	12	SEARCH DOWN / TRACK DOWN
4	FRW / FFW BUTTONS	13	SEARCH UP / TRACK UP
5	BLINKING LED	14	BALANCE / FADER
6	UP	15	BASS / TREBLE
7	DOWN	16	PRESET 1 . 2 . 3/ DISK 1.2.3
8	ON / OFF	17	PRESET 4/ DISK 4
9	SEL MODE		DOLBY
10	TRAFFIC ANNOUNCEMENT	18	PRESET 5 / DISK 5/RANDOM TRACK
	ALTERNATIVE FREQUENCIES	19	PRESET 6 / DISK 6
			TAPE METAL CHROME

CONNECTIONS



A1	Phone mute	A : POWER SUPPLY
A2	VAN bus 1	
A3	VAN bus 2	
A4	Plus permanent power supply	
A5	14V switched	
A6	Illumination plus	
A7	14V Ignition key	
A8	Power supply ground	
B1	Rear right +	B : LOUDSPEAKER SUPPLY
B2	Rear right -	
B3	Front right +	
B4	Front right -	
B5	Front left +	
B6	Front left -	
B7	Rear left +	
B8	Rear left -	
C1	Ground	C:CD CHANGER connections
C2	D2B Bus 1	
C3	D2B Bus 2	
C5	14V Permanent = A4	
C6	Ground power	
C7	14V Switched	
C8	Line in right	
C9	line in left	
C10	line in ground	
D1	Switched battery plus	D : REMOTE CONTROL
D2	a1 = Remote control 1 in	
D3	Remote control ground	
D4	a2 = Remote control 2 in	
D5		
D6		
D7		
E	Aerial plug	E : AERIAL PLUG SLIDE IN
F	Fuse	F : FUSE 10 A

PCS 86 721

TECHNICAL DATA

GENERAL

Power supply	:14.4V DC
Dimensions	:180x150x51 mm
Security code	: Yes

RADIO

LW	: 144-288 KHz
MW	: 531-1611 KHz
FM	: 87.5-108 MHz
IF-AM (1/2)	: 10.7 MHz/450 KHz
IF-FM (1/2)	: 72.2 MHz/10.7 MHz
Sensivity 26dB S/N	: 30 µV (LW) : 25 µV (MW) : 2.5 µV (FM)
Limitation α-3dB	: 5.5 ± 2.5 µV

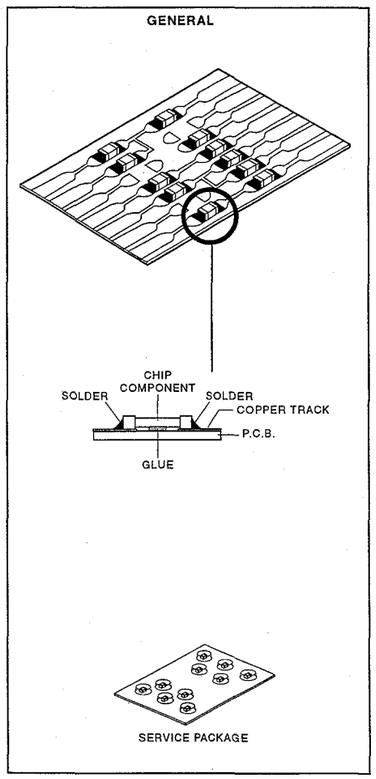
CASSETTE

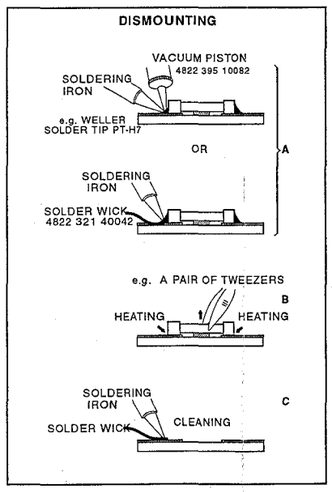
Cassette mechanism	: P6-29/3
Number of tracks	: 2x2
Tape speed	: 4.76 cm/sec
Wow and flutter	: ≤ 0.35%
Crosstalk	: ≥ 35 dB

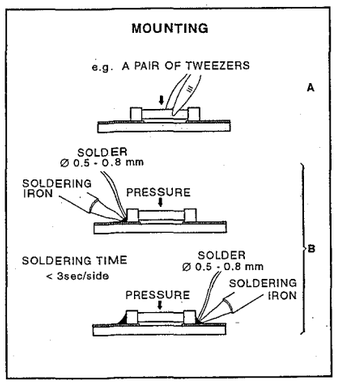
AMPLIFIER

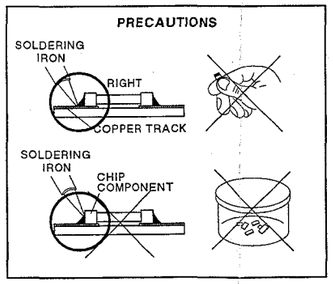
Output power	: 4x10 W / 4 Ω (D = 1%)
Fader control	: >12 dB
Balance control	: 12 dB
Channel separation	: >40 dB
Input sensivity (CD in) (for 1W)	: 75 mV ± 2 dB

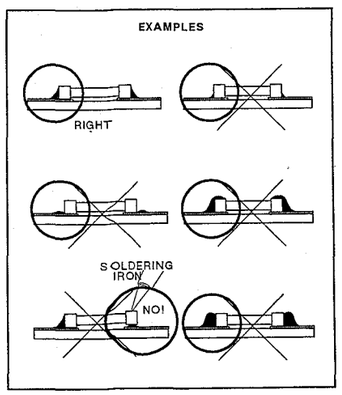
HANDLING CHIP COMPONENTS











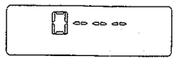
22DC594/35X

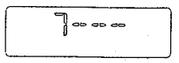
Security Code

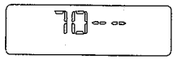
The security code cannot be deactivated.

Entering the code: Suppose that the code is 7637

Set ON. The display shows.....

Press preset 1. The display shows..... 

Press UP or DOWN until the display shows..... 

Press preset 1 The display shows..... 

Pres UP or DOWN until the display shows.....

and so on until the display shows.....

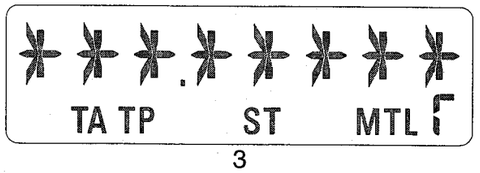
The set bleeps and the tuner starts.

Display test

This test is called by turning the set on while pressing key **1.**
A number of easily recognizable patterns will be displayed in succession (see figs.1 thru 5).
The test can be stopped by turning the set off.

1

2



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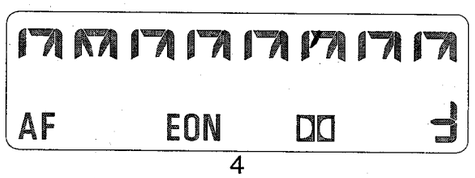

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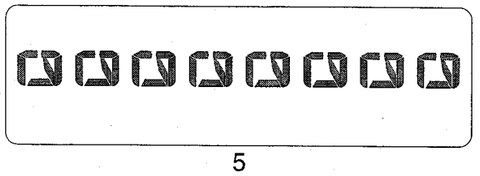

5

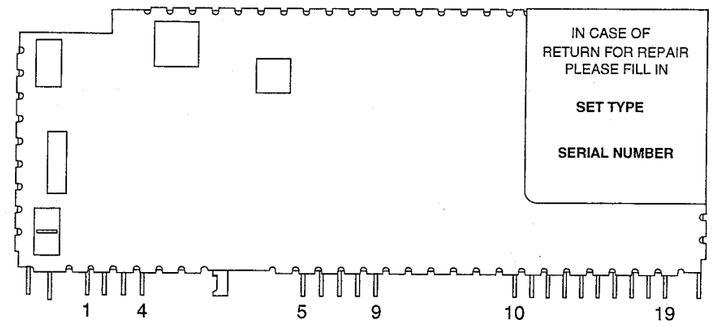
ESD

WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

IC91 MODULE

Module not reparable. Do not open and do not try to repair yourself!



Connections

1	AM/FM Aerial input	10	Multiplex / RDS output signal
2	Ground	11	Unweighted level output
3	Not used	12	I^2C SDA
4	Not used	13	I^2C SCL
		14	Not used
5	Output lock detector	15	Output Left
6	Vcc 8.5V	16	Output Right
7	Ground	17	Ground
8	Vcc 5.0V	18	Not used
9	V reference	19	Not used

Quick reference data:

1) AM part
- -Longwave/Mediumwave 144-1710 KHz
- -Shortwave 5900-6250 KHz
- -AM double super concept
- -AM IF1 10.7MHz
- -AM IF2 450KHz
- -First VCO frequency above input signal frequency
- -Second X-tal oscillator frenquency below IF1
- -Usable sensivity α26dB MW = 14μV typ.

1) FM part
- -FM 87.5 - 108MHz
- -FM double super concept
- -FM IF1 72.2MHz
- -FM IF2 10.7MHz
- -First VCO frequency above input signal frequency
- -Second X-tal oscillator frenquency below IF1
- -Usable sensivity α26dB =2.5μV typ.
- -THD 1mV δf=75KHz = 0.4% typ
- -Signal to noise ratio = 65dB typ
- -Locktime synthetizer <2mSec

22DC5 94/35X

PCS 86 722

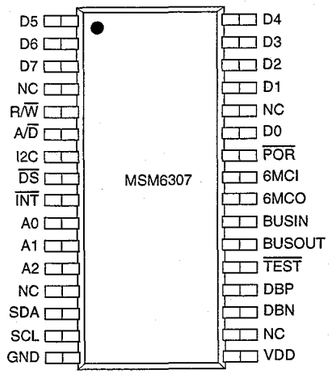
INTEGRATED CIRCUITS

SAA6579T Radio Data System demodulator

SYMBOL	PIN	DESCRIPTION
QUAL	1	quality indication output
RDDA	2	RDS data output
V_{ref}	3	reference voltage output (0.5 V_{DDA})
MPX	4	multiplex input signal
V_{DDA}	5	+5V supply voltage for analog part
V_{SSA}	6	ground for analog part (0V)
CIN	7	subcarrier input to comparator
SCOUT	8	subcarrier output for reconstruction filter
TCTR	9	test control
TEN	10	test enable
V_{SSD}	11	ground for digital part (0V)
V_{DDD}	12	+5V supply voltage for digital part
OSCI	13	oscillator input
OSCO	14	oscillator output
T57	15	57kHz clock signal output
RDCL	16	RDS clock output

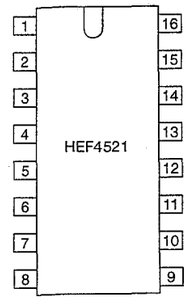
MSM6307GS D^2B IC

SYMBOL	I/O	DESCRIPTION
POR	I	Power on - reset
R / W	I	Read / Write selector
DS	I	Data strobe to access data bus
A / D	I	Selects address or data on D0 ~ d7
SDA	I/O	I^2C data signal input / output
SCL	I/O	I^2C clock signal input / output
I2C	I	Selects I^2C or parallel interface
INT	O	Interrupt output
BUSIN	I	D2B input (TTL level)
BUSOUT	O	D2B output (TTL level)
DBN & DBP	I/Os	Differential D2B lines of the internal driver/ receiver, to be terminated with 60Ω
TEST	I	Selects the test mode for factory purposes
6MCI	I	Clock input 6MHz resonator or X-TAL
6MCO	O	Clock output 6MHz resonator or X-TAL
D0 ~ D7	I/Os	8-bit bi-directional address or data bus
A0 ~ A2	I	Programmables I^2C slave addresses



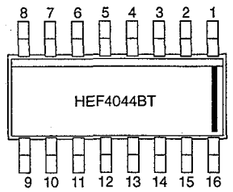
HEF4521BP 24-stage frequency divider

SYMBOL	PIN	DESCRIPTION
O_{24}	1	output 2^{24}
MR	2	asynchronous master reset
$V_{SS'}$	3	
O_2	4	
$V_{DD'}$	5	
I_2	6	
O_1	7	
V_{SS}	8	ground
I_1	9	
O_{18}	10	output 2^{18}
O_{19}	11	output 2^{19}
O_{20}	12	output 2^{20}
O_{21}	13	output 2^{21}
O_{22}	14	output 2^{22}
O_{23}	15	set input 3 (active LOW)
V_{DD}	16	power supply



HEF4044BT Quad R/S latch with 3-state outputs

SYMBOL	PIN	DESCRIPTION
O_3	1	3-state buffered latch output 3
n.c	2	
$\overline{S}_0$	3	set input 0 (active LOW)
R_0	4	reset input 0 (active LOW)
E0	5	common output enable input
R_1	6	reset input 1 (active LOW)
$\overline{S}_1$	7	set input 1 (active LOW)
V_{SS}	8	ground
O_1	9	3-state buffered latch output 1
O_2	10	3-state buffered latch output 2
$\overline{S}_2$	11	set input 2 (active LOW)
R_2	12	reset input 2 (active LOW)
O_0	13	3-state buffered latch output 0
R_3	14	reset input 3 (active LOW)
$\overline{S}_3$	15	set input 3 (active LOW)
V_{DD}	16	supply



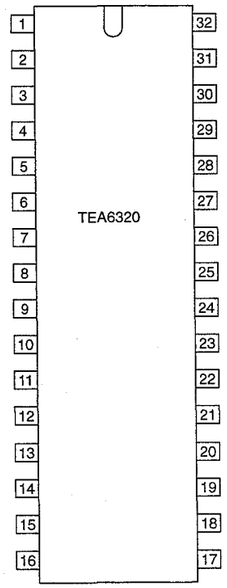
FUNCTION TABLE

inputs			output
E0	S_n	Rn	O_n
L	X	X	Z
H	L	H	H
H	X	L	L
H	H	H	latched

Z = high impedance OFF-state

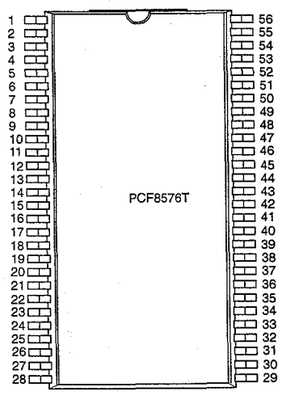
TEA6320 Sound Fader control circuit

SYMBOL	PIN	DESCRIPTION
SDA	1	serial data input/output
GND	2	ground
OUTLR	3	output left rear
OUTLF	4	output left front
TL	5	treble control capacitor left channel or input from an ext equalizer
B2L	6	bass control capacitor left channel or output to an ext equalizer
B1L	7	bass control capacitor, left channel
IVL	8	input volume l, left control part
ILL	9	input loudness, left control part
QSL	10	output source selector, left channel
IDL	11	input D left source
MUTE	12	mute control
ICL	13	input C left source
IMO	14	input mono source
IBL	15	input B left source
IAL	16	input A left source
IAR	17	input A right source
IBR	18	input B right source
CAP	19	electronic filtering for supply
ICR	20	input C right source
V_{ref}	21	reference voltage (0.5Vcc)
IDR	22	input D right source
QSR	23	output source selector right channel
ILR	24	input loudness right channel
IVR	25	input volume l, right control part
B1R	26	bass control capacitor right channel
B2R	27	bass control capacitor right channel or output to an ext equalizer
TR	28	treble control capacitor right channel or input from an ext equalizer
OUTRF	29	output right front
OUTRR	30	output right rear
Vcc	31	supply voltage
SCL	32	serial clock input



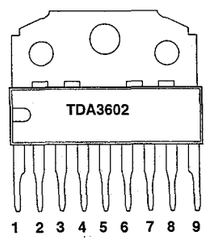
PCF8576T Universal LCD driver for low multiplex rates

SYMBOL	PIN	DESCRIPTION
SDA	1	I^2C bus data input/output
SCL	2	I^2C bus clock input/output
SYNC	3	cascade synchronization input/output
CLK	4	external clock input/output
V_{DD}	5	positive supply voltage
OSC	6	oscillator input
A0	7	I^2C bus subaddress input
A1	8	I^2C bus subaddress input
A2	9	I^2C bus subaddress input
SA0	10	I^2C bus slave address bit 0 input
V_{SS}	11	logic ground
V_{LCD}	12	LCD supply voltage
BP0	13	LCD backplane outputs
BP2	14	LCD backplane outputs
BP1	15	LCD backplane outputs
BP3	16	LCD backplane outputs
S0 to S39	17 to 56	LCD segment outputs



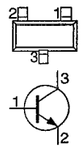
TDA3602 Multiple output voltage regulator

SYMBOL	PIN	DESCRIPTION
V_P	1	positive supply voltage
REG1	2	regulator 1 output
RESET	3	reset output
SCI	4	state control input
HOLD	5	hold output
GND	6	ground
REG3	7	regulator 3 output
V_{bu}	8	back-up
REG2	9	regulator 2 output

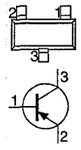


TRANSISTORS

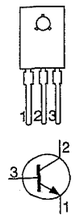
BC847B / BFS19



BC857B

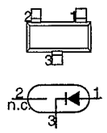


BD437 / BD675

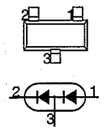


DIODES

BAS 16



BAV 99



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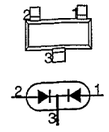
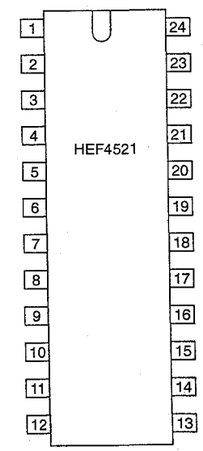
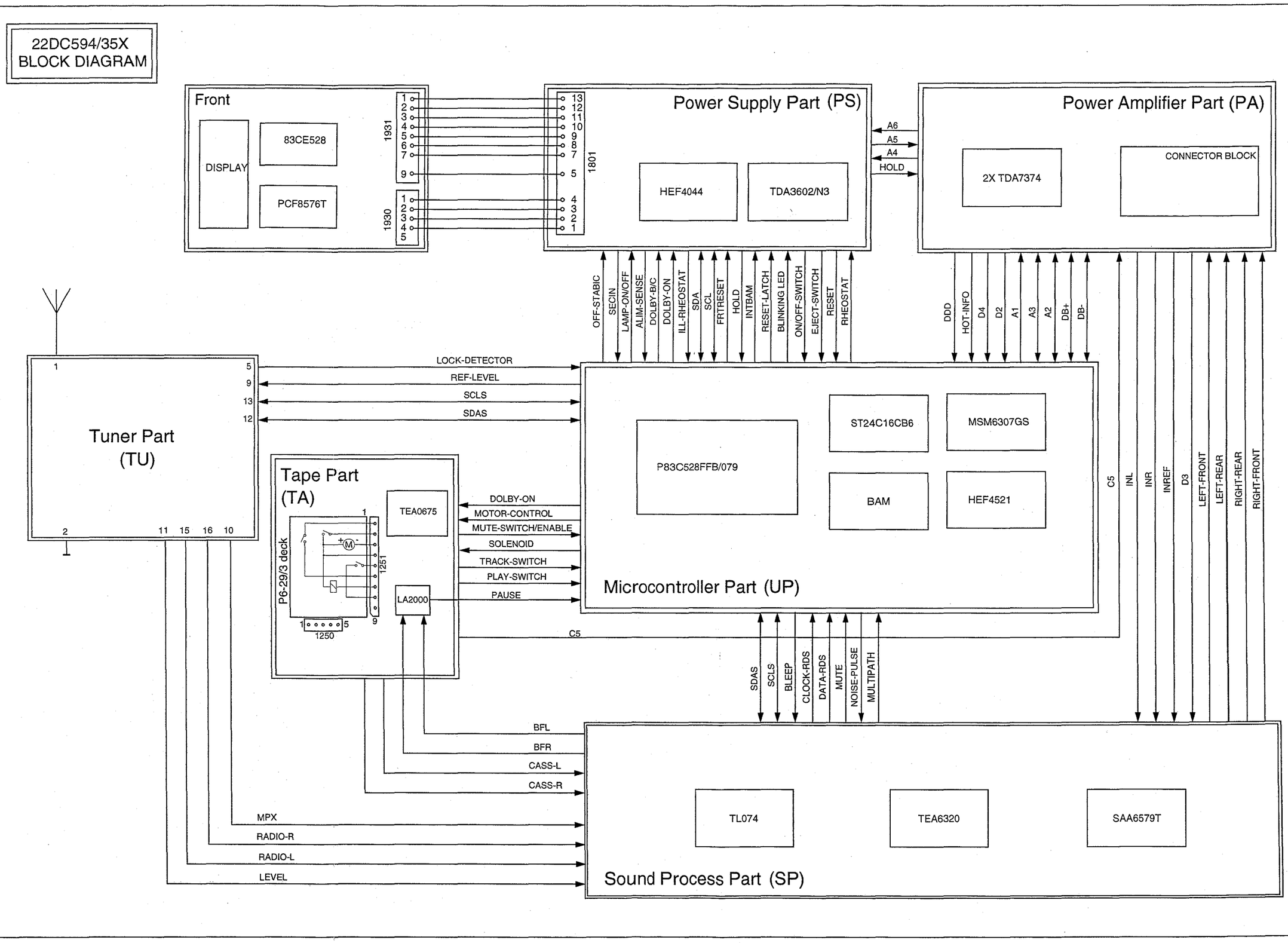


TEA0675T Dual Dolby B-type noise reduction circuit

SYMBOL	PIN	DESCRIPTION
OUTA	1	output channel A
INTA	2	integrating filter channel A
CONTRA	3	control voltage channel A
HPA	4	high-pass filter channel A
SCA	5	side chain channel A
TD	6	delay time constant
EQA	7	equalizing output channel A
EQFA	8	equalizing input channel A
V_{CC}	9	voltage supply
INA1	10	input channel A1 (forward or reverse)
V_{REF}	11	reference voltage
INA2	12	input channel A2 (reverse or forward)
INB2	13	input channel B2 (reverse or forward)
HS	14	headswitch input
INB1	15	input channel B1 (forward or reverse)
GND	16	ground
EQFB	17	equalizing input channel B
EQB	18	equalizing output channel B
AMSEQ	19	AMS output and EQ-switch input
SCB	20	side chain channel B
HPB	21	high-pass filter channel B
CONTRB	22	control voltage channel B
INTB	23	integrating filter channel B
OUTB	24	output channel B

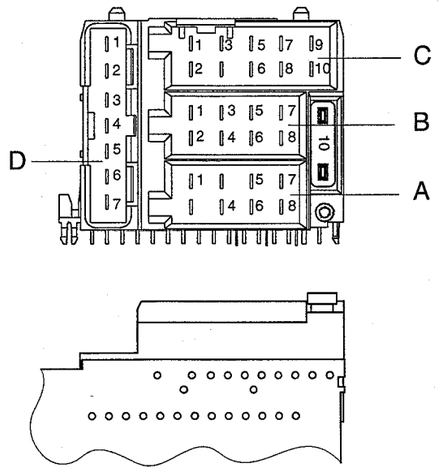


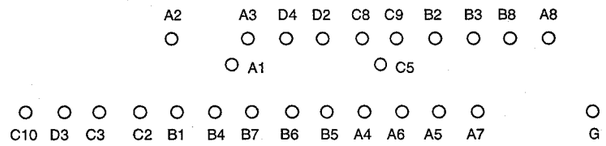
22DC594/35X BLOCK DIAGRAM



PCS 86 724

CONNECTOR BLOCK





Check and Alignment

No alignment is needed for radio part. IC91 tuner is pre-aligned.

Dolby alignment:

cassette	adjust	
MTT 150 F = 400 Hz 200 nWb	3260 and 3261	AC voltage at pin 1 & 24 of 7251 = 387.5 mV +/- 50mV

Checks:

Reference oscillator frequencies

device	MSM 6307	83CE558	HEF4521	SAA6579T
pin	24 & 25	51 & 52	4 & 6	13 & 14
frequency	6 MHz 0.5%	11.5 MHz 0.5%	4.194304 MHz 20 ppm	4.332 MHz 60 ppm

FM mute:

98 MHz 1mV	output at load resistor R & L = 775 mV = REF
no signal	output should be < -24 dB (REF - 24 dB)

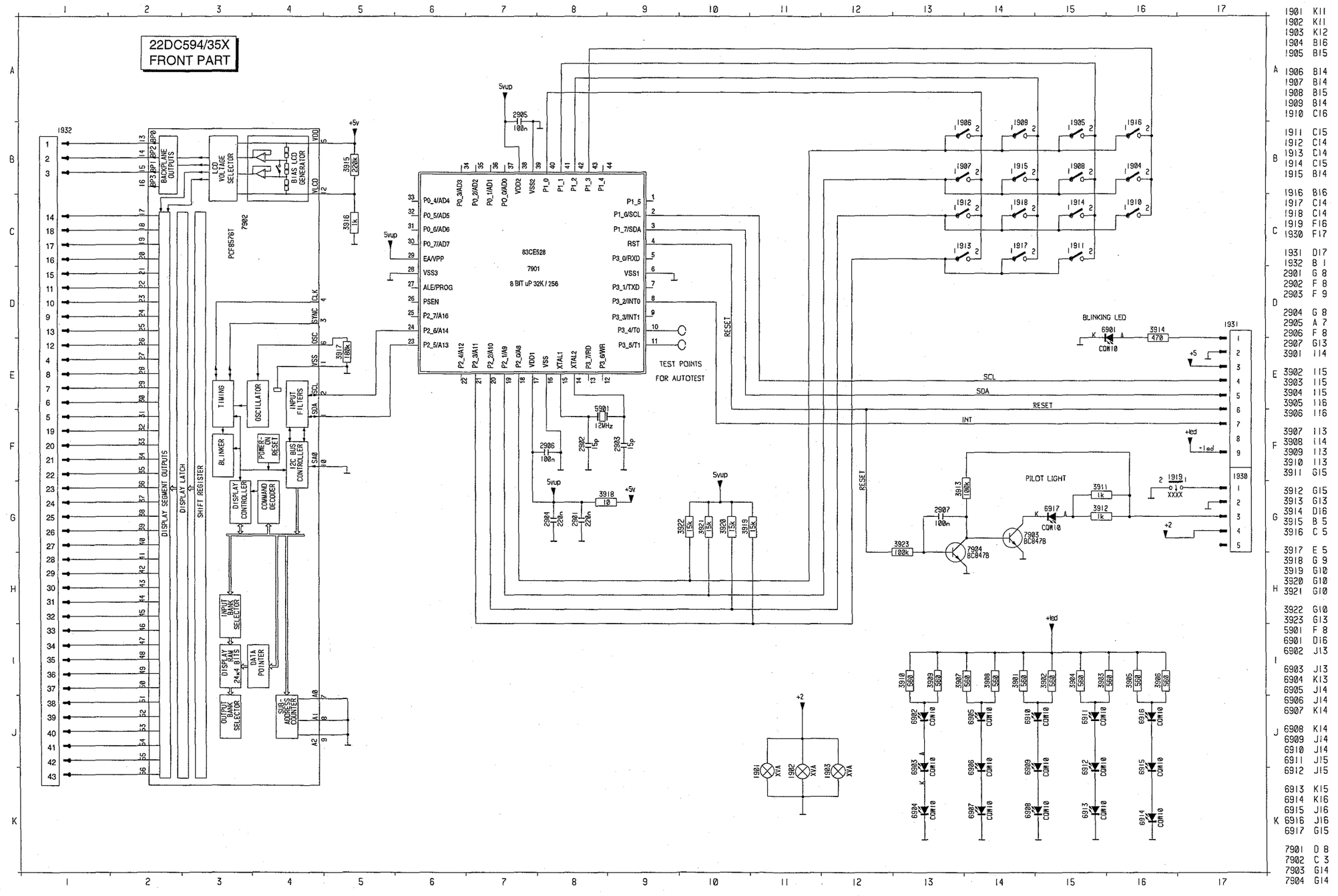
Demodulated FM levels

Input	Output of IC91 (pin 16 & 17)
98 MHz	300 mV 50 mV

IMPORTANT:

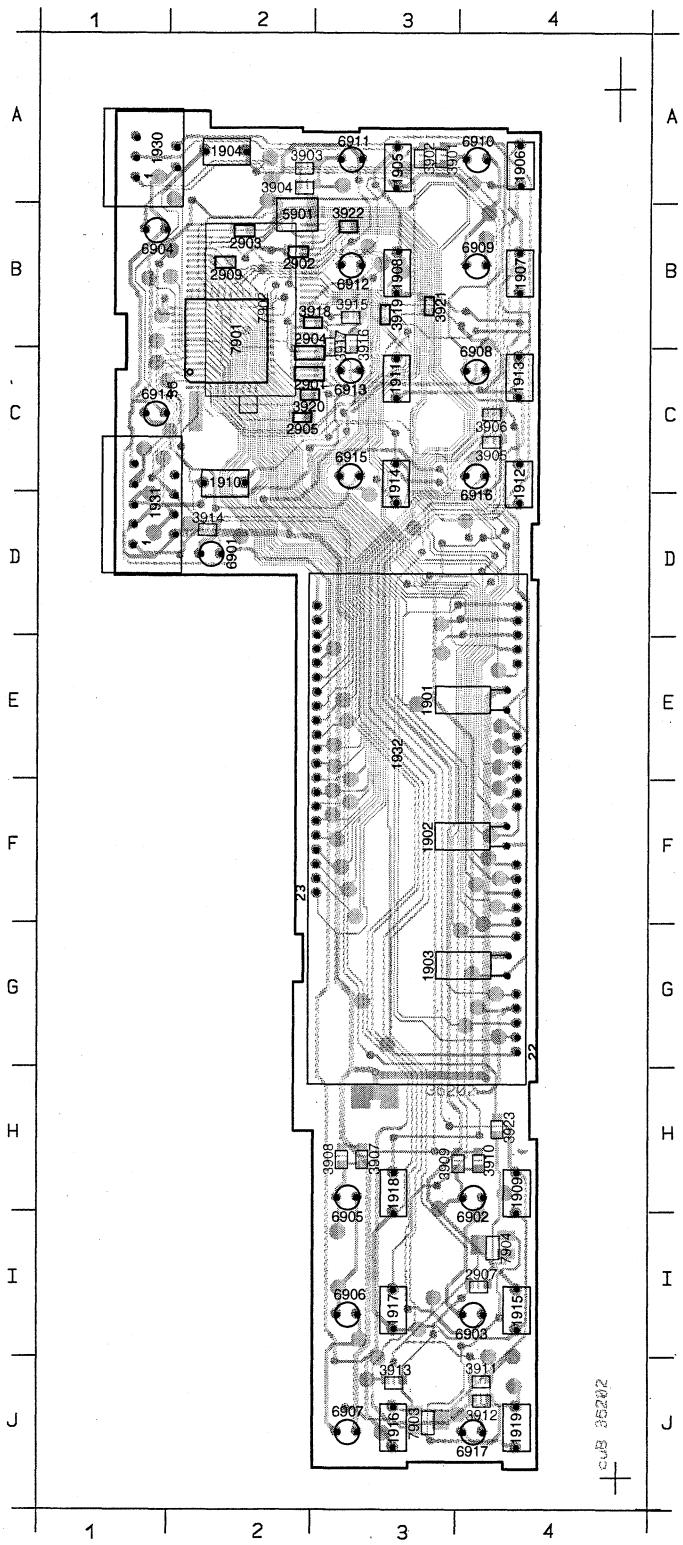
The search levels are measured and values are put in the EEprom at the factory.
Service provides EEproms containig mean values of search levels.
Consequence:
If you have to change the IC91 module, you must also change the EEprom.

22DC594/35X
FRONT PART



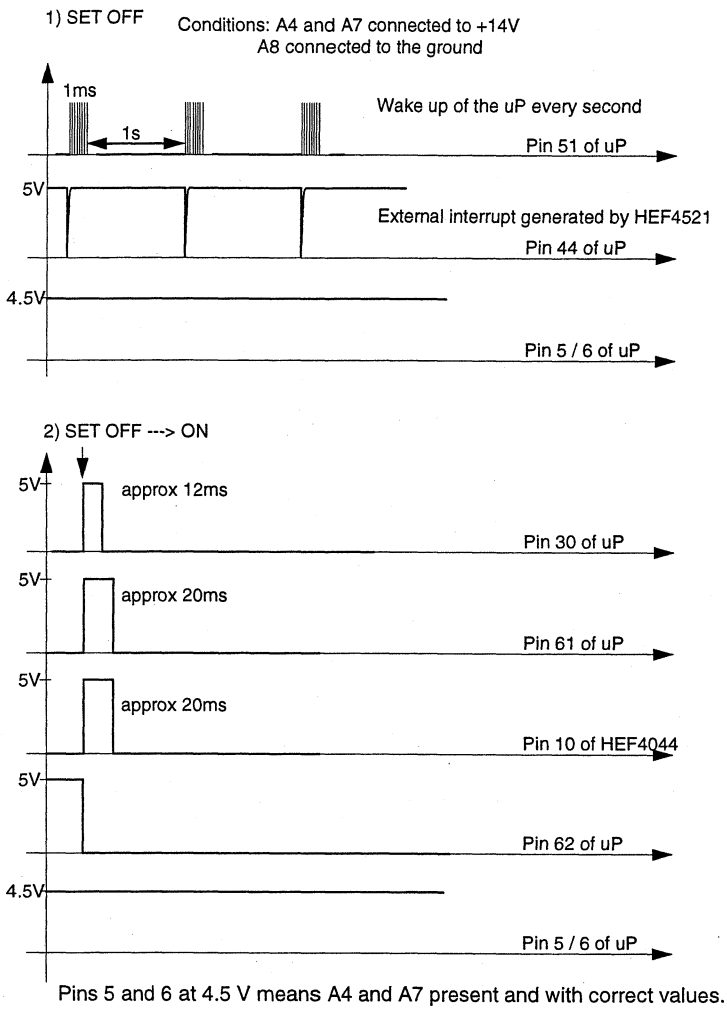
1901 K11
1902 K11
1903 K12
1904 B16
1905 B15
1906 B14
1907 B14
1908 B15
1909 B14
1910 C16
1911 C15
1912 C14
1913 C14
1914 C15
1915 B14
1916 B16
1917 C14
1918 C14
1919 F16
1930 F17
1931 D17
1932 B 1
2901 G 8
2902 F 8
2903 F 9
2904 G 8
2905 A 7
2906 F 8
2907 G13
3901 I14
3902 I15
3903 I15
3904 I15
3905 I16
3906 I16
3907 I13
3908 I14
3909 I13
3910 I13
3911 G15
3912 G15
3913 G13
3914 D16
3915 B 5
3916 C 5
3917 E 5
3918 G 9
3919 G10
3920 G10
3921 G10
3922 G10
3923 G13
5901 F 8
6901 D16
6902 J13
6903 J13
6904 K13
6905 J14
6906 J14
6907 K14
6908 K14
6909 J14
6910 J14
6911 J15
6912 J15
6913 K15
6914 K16
6915 J16
6916 J16
6917 G15
7901 D 8
7902 C 3
7903 G14
7904 G14

22DC594/35X
FRONT PWB LAYOUT



1390	A 1	3917	B 3
1901	E 4	3918	B 2
1902	F 4	3919	B 3
1903	G 4	3920	C 2
1904	A 2	3921	B 3
1905	A 3	3922	B 3
1906	A 4	3923	H 4
1907	B 4	5901	B 2
1908	B 3	6901	D 2
1909	H 4	6902	H 4
1910	C 2	6903	I 4
1911	C 3	6904	B 1
1912	C 4	6905	H 3
1913	C 4	6906	I 3
1914	C 3	6907	J 3
1915	I 4	6908	C 4
1916	J 3	6909	B 4
1917	I 3	6910	A 4
1918	H 3	6911	A 3
1919	J 4	6912	B 3
1931	D 1	6913	C 3
1932	E 3	6914	C 1
2901	C 2	6915	C 3
2902	B 2	6916	C 4
2903	B 2	6917	J 4
2904	C 2	7901	C 2
2905	C 2	7902	B 2
2907	I 4	7903	J 3
2909	B 2	7904	I 4
3901	A 3		
3902	A 3		
3903	A 2		
3904	A 2		
3905	C 4		
3906	C 4		
3907	H 3		
3908	H 3		
3909	H 4		
3910	H 4		
3911	J 4		
3912	J 4		
3913	J 3		
3914	D 2		
3915	B 3		
3916	B 3		

SHORT EXPLANATION OF THE START UP OF THE SET



Pins 5 and 6 at 4.5 V means A4 and A7 present and with correct values.

7603 MSM6307GS

1 = N.C.	12 = 5.0 V	23 = 5.0 V
2 = N.C.	13 = N.C.	24 = 5.75 MHz
3 = N.C.	14 = 4.9 V SDA	25 = 5.75 MHz
4 = N.C.	15 = 4.9 V SCL	26 = 4.8 V
5 = 5.0 V	16 = GND	27 = N.C.
6 = 5.0 V	17 = 5.0 V	28 = N.C.
7 = 5.0 V	18 = N.C.	29 = N.C.
8 = 5.0 V	19 = 2.3 V	30 = N.C.
9 = 4.8 V	20 = 2.3 V	31 = N.C.
10 = 5.0 V	21 = 5.0 V	32 = N.C.
11 = 5.0 V	22 = N.C.	

7602 HEF4521

1 = N.C.	9 = GND
2 = GND	10 = 1 Hz ⎍
3 = GND	11 = N.C.
4 = 2.5 V	12 = N.C.
5 = 5.0 V	13 = N.C.
6 = 2.4 V	14 = N.C.
7 = 2.4V	15 = N.C.
8 = GND	16 = 5.0 V

7601 ST24C16

1 = 5.0 V	5 = 5.0 V SDA
2 = 5.0 V	6 = 5.0 V SCL
3 = 5.0 V	7 = GND
4 = GND	8 = 5.0 V

7800 P83CE558EFB/046

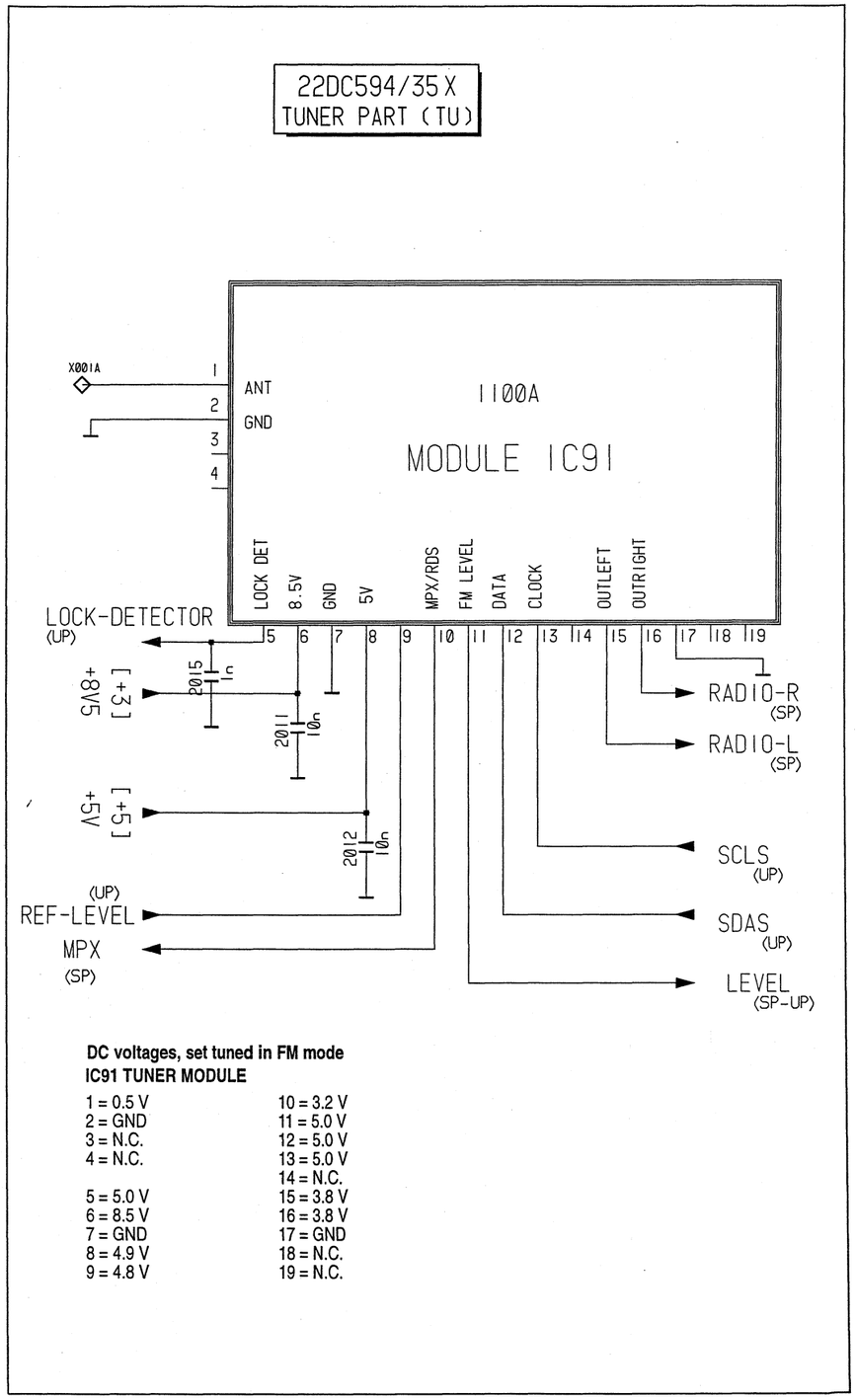
1 = GND
2 = 5.0 V
3 = GND
4 = 5.0 V
5 = 4.5 V
6 = 4.5 V
7 = 4.0 V
8 = 4.8 V
9 = 0.0 V
10 = 4.8 V
11 = 2.8 to 3.6 V
12 = 0.0 V
13 = GND
14 = 5.0 V
15 = GND
16 = 0.0 V ON / 5.0 V OFF
17 = GND
18 = 4.9 V
19 = 5.0 V
20 = 0.0 V / 5.0 V mute ON
21 = 0.0 V / 5.0 V tel mute
22 = N.C.
23 = N.C.
24 = 5.0 V
25 = N.C.
26 = 5.0 V
27 = N.C.
28 = 5.0 V
29 = GND
30 = 0.0 V /⎍ ON
31 = 4.8 V / 0.0V OFF
32 = 4.9 V
33 = N.C.
34 = N.C.
35 = N.C.
36 = N.C.
37 = 5.0 V / 0.0 V no signal
38 = 5.0 V
39 = 4.5 V
40 = 4.8 V
41 = 4.8 V / 0.0 V MTL OFF
42 = 5.0 V
43 = CLK RDS
44 = 4.9 V
45 = DATA RDS
46 = 0.0 V / 4.8 V Dolby ON
47 = 4.9 V / 3.7 V Dolby ON
48 = 4.8 V
49 = N.C.
50 = N.C.
51 = 11.5 MHz
52 = 11.5 MHz
53 = 5.0 V
54 = GND
55 = 4.8 V
56 = N.C.
57 = 4.9 V
58 = 0.0 V /⎍ ON
59 = N.C.
60 = 5.0 V
61 = 0.0 V /⎍ OFF
62 = 0.0 V ON / 5.0 V OFF
63 = 4.9 V
64 = 0.0 V
65 = 5.0 V
66 = 5.0 V
67 = GND
68 = 4.9 V CASS IN
69 = 5.0 V ON / 0.0 V OFF
70 = 0.0 V > / 5.0 V <
71 = 0.8 V
72 = 1.8 V ON / 0.0 V OFF
73 = 5.0 V
74 = 1.5 V CASS IN
75 = 0.0 V
76 = 5.0 V
77 = GND
78 = N.C.
79 = GND
80 = 5.0 V

A1 ..... H1	CLOCK-RDS H9	DOLBY-B/C H10	ILL-RHEOSTAT D12	MOTOR-CONTROL D10	OFF-STABIC H9	REMOTE2 ..... L3/D12	SDA K7
A2 ..... K4	DATA-RDS H10	DOLBY-ON H10	INTBAM J8	MT/CR H9	ON/OFF-SWITCH H8	RESET F16	SDAS H7/K11
A3 ..... J4	D2 ..... J1	FRTRESET H8	INT_D2B D9/J11	MULTIPATH D12	PAUSE D7	RESET-LATCH H8	SECIN D11
ALIM-SENSE D11	D4 ..... K1	HOLD C7/D9/L7	LAMPE-ON/OFF D10	MUTE H11	PLAY-SWITCH D9	RHEOSTAT E16	SOLENOID D10
BLEEP H9	DB+ J17	HOLD2 ..... B8	LEVEL B12	MUTE-SWITCH/ENABLE ... D10	REF-LEVEL A11	SCL K7	TELEPHONE-MUTE H11/H3
BLINKING-LED H8	DB- K17	HOT-INFO I12	LOCK-DETECTOR H16	NOISE-PULSE D10	REMOTE1 ..... J3/D11	SCLS H10/K11	TRACK-SWITCH D9

22DC594/35X
MICROPROCESSOR PART

1600	J 5	3726	A 4				
2013	C13	3727	A 4				
2014	C11	3728	C 3				
2296	L 6	3729	A 4				
2597	K 1	3730	F 6				
A 2600	F 2	3731	F 6				
2601	F 1	3732	J11				
2602	G15	3824	H 7				
2603	H15	3825	I11				
2605	G 5	3828	J 9				
2606	B 1	3842	F15				
2615	F 2	3846	H 8				
B 2617	F 3	5600	E 1				
2618	B14	5601	G 5				
2619	L15	5603	J13				
2622	H 1	5604	D 6				
2623	J11	5605	E 6				
2627	K 3	5606	L16				
C 2628	L 3	6610	K16				
2630	I13	6611	L16				
2632	E 6	6819	H 1				
		7600	F10				
2634	D17	7601	B 1				
2635	C15	7602	C16				
D 3004	C12	7603	L13				
3012	H13	7609	H 2				
3013	B11	9600	D 6				
3014	B11	9610	J16				
3601	J 5	9620	K16				
3609	K 5						
E 3610	J17						
3613	H 2						
3614	H 2						
3619	G 1						
3620	K17						
F 3621	K15						
3622	J 2						
3623	K 2						
3624	J 1						
3625	J 1						
3627	J13						
3628	H 9						
G 3700	G 2						
3701	G15						
3703	A 5						
3704	A 5						
3706	B15						
3707	D15						
H 3709	C17						
3710	G 6						
3711	B15						
3712	D16						
3713	B17						
3714	F15						
I 3717	A 3						
3718	B 9						
3719	B 9						
3720	C 8						
3721	B10						
3725	C12						

Technician's remarks

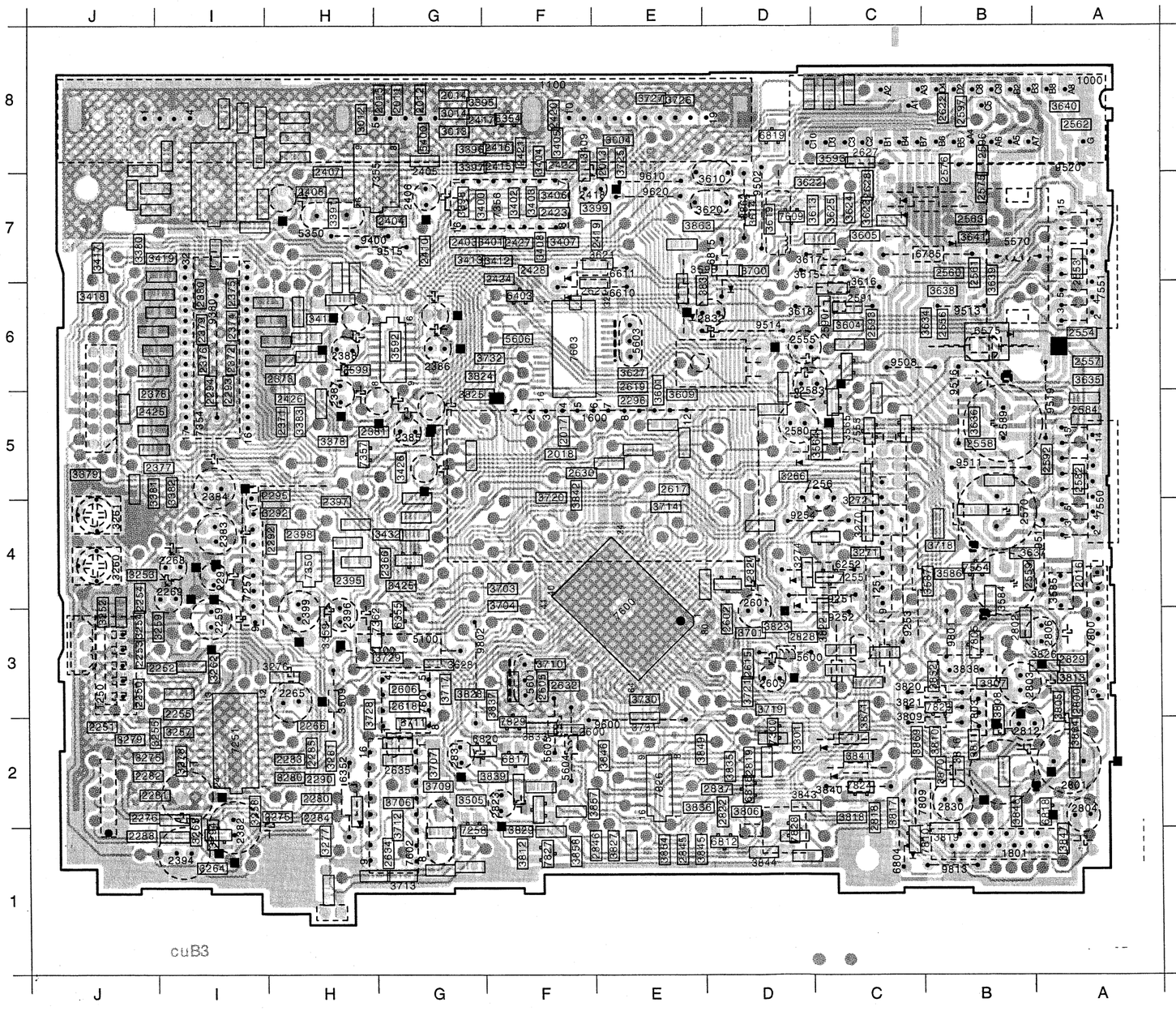


DC voltages, set tuned in FM mode
IC91 TUNER MODULE

1 = 0.5 V	10 = 3.2 V
2 = GND	11 = 5.0 V
3 = N.C.	12 = 5.0 V
4 = N.C.	13 = 5.0 V
	14 = N.C.
5 = 5.0 V	15 = 3.8 V
6 = 8.5 V	16 = 3.8 V
7 = GND	17 = GND
8 = 4.9 V	18 = N.C.
9 = 4.8 V	19 = N.C.

1000 A 8 2268 I 4 2387 H 5 2570 B 4 2804 A 2 3261 J 4 3620 D 7 5350 H 7 6352 H 2 7354 I 6 7809 C 2 9508 C 6 9520 B 8
1100 G 8 2269 I 4 2388 H 6 2580 D 5 2806 A 3 3509 H 3 3809 B 2 5570 B 7 6610 E 6 7356 F 7 9251 C 4 9511 B 5 9600 E 2
1250 J 3 2291 I 4 2394 I 1 2583 D 6 2812 B 2 3585 A 4 3820 B 3 5600 D 3 6611 E 7 7550 A 5 9252 C 3 9513 B 6 9610 E 7
1251 C 4 2382 I 2 2396 H 3 2589 B 5 2823 F 2 3610 D 7 3821 B 3 5601 F 3 6785 B 7 7551 A 7 9253 C 4 9514 D 6 9620 E 7
1600 F 5 2383 I 4 2399 H 3 2601 D 3 2830 B 2 3615 C 7 3838 B 3 5603 E 6 6804 C 1 7601 G 3 9254 C 4 9515 G 7 9801 B 3
1801 B 1 2384 I 5 2406 G 7 2603 D 3 2831 G 2 3616 C 6 3840 C 2 5604 F 2 6815 D 7 7602 G 2 9380 I 6 9516 B 5 9802 G 3
2259 I 3 2385 G 5 2418 E 7 2801 A 2 2832 D 6 3617 C 7 3862 D 7 5605 F 2 7256 C 5 7800 A 3 9400 H 7 9517 A 4 9813 B 1
2265 H 3 2386 G 6 2555 D 6 2803 B 3 3260 J 4 3618 C 6 5100 G 3 6252 C 4 7257 I 4 7803 B 3 9502 D 7 9519 A 5

22DC594/35X



2011 G 8 2584 A 5 3401 F 7 3807 B 3
2012 G 8 2590 C 6 3402 F 7 3808 B 2
2013 E 8 2591 C 6 3403 F 7 3810 B 2
2014 G 8 2592 A 5 3404 F 8 3811 B 2
2015 G 8 2593 C 6 3405 F 8 3812 F 1

2016 A 4 2596 B 8 3406 F 7 3813 A 3
2017 F 5 2597 B 8 3407 F 7 3816 B 2
2018 F 5 2600 F 2 3408 F 7 3817 C 2
2250 J 3 2602 D 3 3409 F 8 3818 C 2
2251 J 2 2605 F 3 3412 F 7 3819 B 1

2252 I 3 2606 G 3 3413 G 7 3822 C 3
2253 J 3 2615 D 3 3416 H 6 3823 D 3
2254 J 4 2617 E 5 3417 J 7 3824 G 6
2255 I 3 2618 G 3 3418 J 6 3825 G 5
2266 H 2 2619 E 6 3419 I 7 3826 A 3

8
2275 H 2 2622 B 8 3425 G 4 3827 E 1
2276 J 2 2623 E 6 3426 G 5 3828 G 3
2280 H 2 2627 C 8 3432 G 4 3829 F 1
2281 J 2 2628 C 7 3505 G 2 3831 E 6
2282 J 2 2630 F 5 3564 C 5 3833 F 2

2283 H 2 2632 F 3 3565 C 5 3835 D 2
2284 H 2 2634 G 1 3584 B 4 3836 E 2
2285 H 2 2635 G 2 3586 B 4 3837 F 3
2288 J 1 2800 A 3 3587 B 4 3839 F 2
7 2290 H 2 2802 B 3 3592 G 6 3841 C 2

2292 H 4 2818 C 2 3593 C 8 3842 F 5
2293 I 6 2819 D 2 3598 D 7 3843 D 2
2294 I 6 2822 D 2 3599 H 6 3844 D 1
2295 H 5 2827 D 4 3601 E 6 3845 E 1
2296 E 5 2828 D 3 3604 C 6 3846 E 2

2366 G 4 2829 A 3 3605 C 7 3847 A 1
6 2371 H 5 2837 D 2 3609 E 5 3848 B 2
2372 I 6 2845 E 1 3613 C 7 3849 E 2
2373 H 6 2846 F 1 3614 D 7 3852 B 3
2374 I 6 3004 E 8 3619 D 7 3854 E 1

2375 I 6 3012 H 8 3621 E 7 3857 F 2
2376 I 6 3013 G 8 3622 D 7 3858 F 1
2377 I 5 3014 G 8 3623 C 7 3863 E 7
2378 J 5 3252 J 3 3624 C 7 3864 A 2
5 2379 I 6 3253 J 4 3625 C 7 3869 C 2

2380 I 6 3254 J 3 3627 E 6 3870 B 2
2381 H 5 3255 J 2 3628 G 3 3871 C 3
2395 H 4 3257 I 2 3634 B 6 5400 G 8
2397 H 4 3258 I 2 3635 A 6 5606 F 6
2398 H 4 3259 J 3 3636 B 5 6354 F 8

2403 G 7 3262 I 3 3637 B 4 6355 G 3
4 2404 G 7 3263 I 1 3638 B 6 6403 F 6
2405 G 8 3264 I 1 3639 B 6 6575 B 6
2407 H 8 3266 D 5 3640 A 8 6812 D 1
2408 H 7 3270 C 4 3641 B 7 6816 D 2

2410 G 7 3271 C 4 3700 D 7 6817 F 2
2415 F 8 3272 C 4 3701 D 3 6818 A 2
2416 F 8 3274 D 4 3703 F 4 6819 D 8
2417 F 8 3275 J 2 3704 F 4 6820 G 2
3 2419 E 7 3276 H 3 3706 G 2 7251 I 2

2420 F 8 3277 H 1 3707 G 2 7255 C 4
2421 F 8 3278 I 2 3709 G 2 7258 G 1
2422 F 8 3279 J 2 3710 F 3 7300 D 2
2423 F 7 3280 H 2 3711 G 2 7350 H 4
2424 F 7 3281 H 2 3712 G 2 7355 G 7

2425 J 5 3292 H 4 3713 G 1 7357 H 5
2 2426 H 5 3294 I 1 3714 E 4 7362 H 3
2427 F 7 3301 D 2 3717 G 3 7554 B 4
2428 F 7 3359 H 3 3718 B 4 7555 C 5
2553 A 7 3378 H 5 3719 D 3 7600 E 3

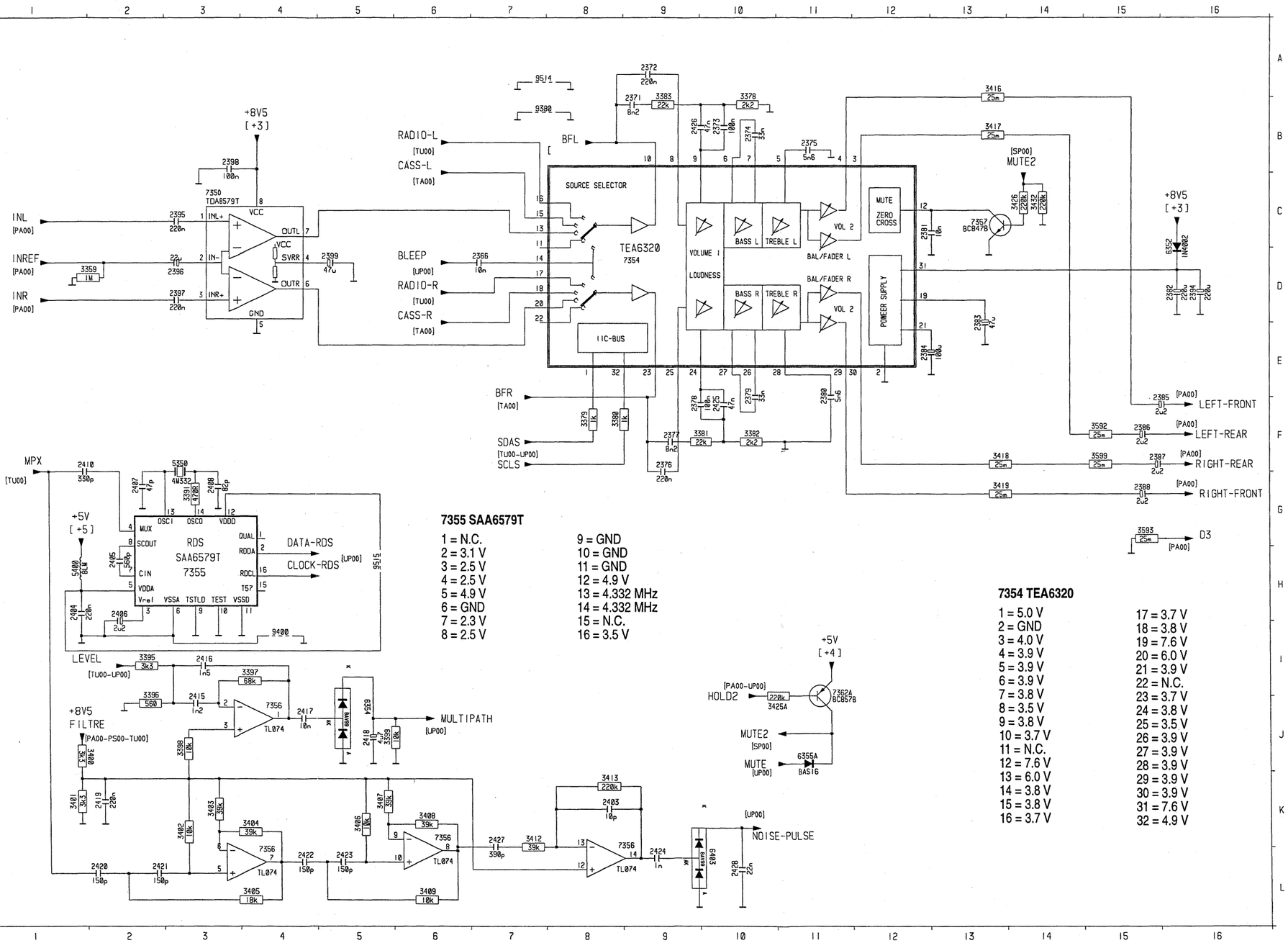
2554 A 6 3379 J 5 3720 F 5 7603 F 6
2556 B 6 3380 J 7 3721 D 3 7609 D 7
2557 A 6 3381 J 5 3725 E 8 7805 B 3
2558 B 5 3382 I 5 3726 E 8 7810 C 1
2559 B 4 3383 H 5 3727 E 8 7823 B 3

1
2560 B 7 3391 H 7 3728 H 3 7824 C 2
2561 B 7 3395 F 8 3729 G 3 7826 E 2
2562 A 8 3396 G 8 3730 E 3 7827 F 1
2563 B 7 3397 G 8 3731 E 2 7828 D 1
2575 B 7 3398 G 7 3732 F 6 7829 F 2

2576 B 8 3399 E 7 3805 A 3
2582 A 5 3400 G 7 3806 D 2

22DC594/35X
SIGNAL PROCESSING PART

BFL B8
BFR E7
BLEEP D6
CASS-L C6
CASS-R D6
CLOCK-RDS H4
D3 ..... G16
DATA-RDS H4
HOLD2 ..... I10
INL C1
INR D1
INREF D1
LEFT-FRONT F16
LEFT-REAR F16
LEVEL I2
MPX F1
MULTIPATH J6
MUTE J11
MUTE2 ..... J11/B13
NOISE-PULSE K10
RADIO-L B6
RADIO-R D6
RIGHT-FRONT G16
RIGHT-REAR F16
SCLS F7
SDAS F7



7355 SAA6579T

1 = N.C.	9 = GND
2 = 3.1 V	10 = GND
3 = 2.5 V	11 = GND
4 = 2.5 V	12 = 4.9 V
5 = 4.9 V	13 = 4.332 MHz
6 = GND	14 = 4.332 MHz
7 = 2.3 V	15 = N.C.
8 = 2.5 V	16 = 3.5 V

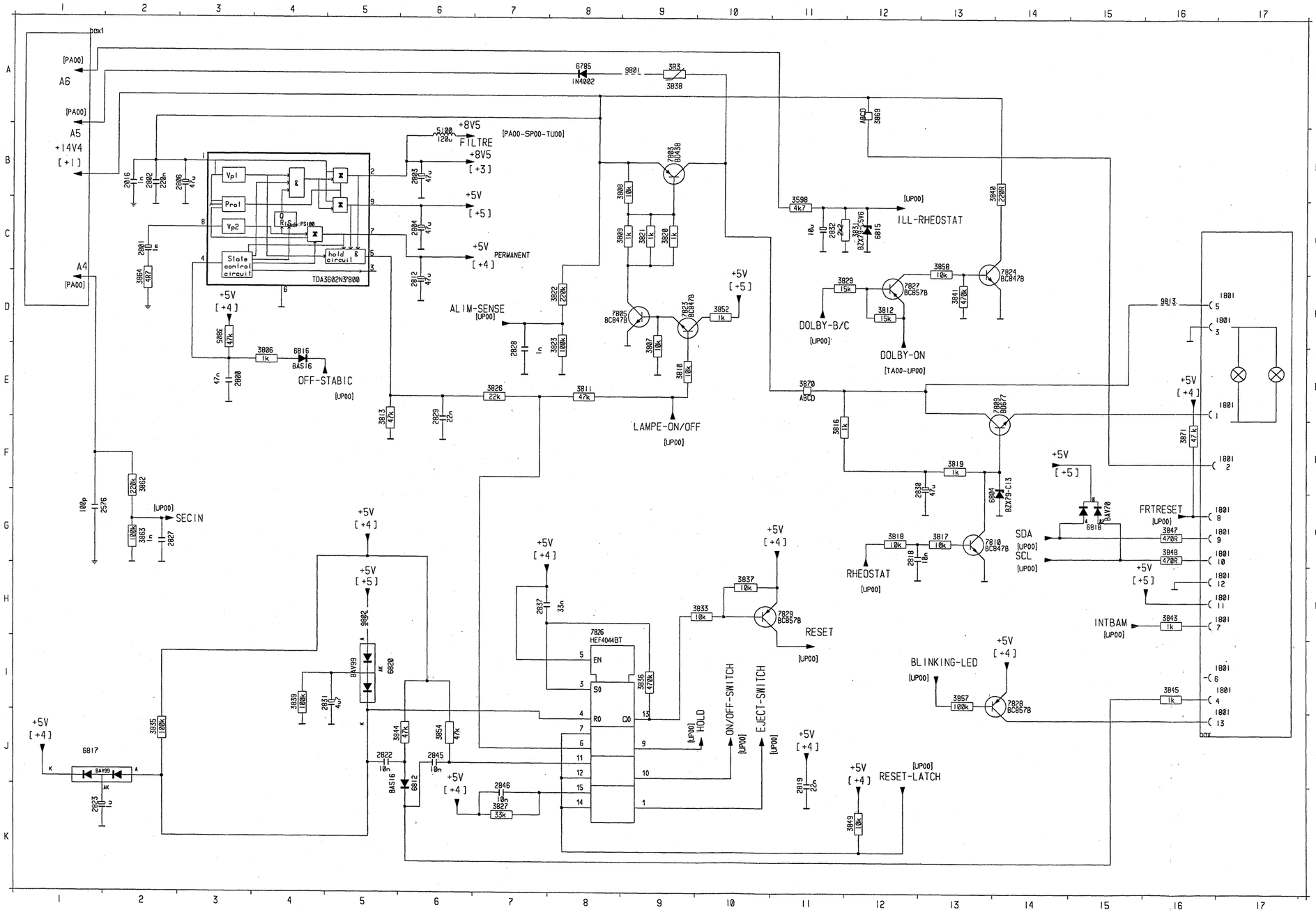
7354 TEA6320

1 = 5.0 V	17 = 3.7 V
2 = GND	18 = 3.8 V
3 = 4.0 V	19 = 7.6 V
4 = 3.9 V	20 = 6.0 V
5 = 3.9 V	21 = 3.9 V
6 = 3.9 V	22 = N.C.
7 = 3.8 V	23 = 3.7 V
8 = 3.5 V	24 = 3.8 V
9 = 3.8 V	25 = 3.5 V
10 = 3.7 V	26 = 3.9 V
11 = N.C.	27 = 3.9 V
12 = 7.6 V	28 = 3.9 V
13 = 6.0 V	29 = 3.9 V
14 = 3.8 V	30 = 3.9 V
15 = 3.8 V	31 = 7.6 V
16 = 3.7 V	32 = 4.9 V

	2366	D 7	3425	J11		2418	J 5
	2371	B 9	3426	C14	F	2419	K 2
	2372	A 9	3432	C14		2420	L 2
	2373	B10	3592	F15		2421	L 2
	2374	B10	3593	G15		2422	L 4
	2375	B11	3599	F15		2423	L 5
A	2376	F 9	5350	F 3		2424	L 9
	2377	F 9	5400	H 1	G	2425	F10
	2378	F 9	6352	C16		2426	B 9
	2379	E10	6354	J 5		2427	K 7
	2380	E11	6355	J11		2428	L10
	2381	C12	6403	L10		3359	D 2
B	2382	D16	7350	C 3		3378	B10
	2383	D13	7354	D 9	H	3379	F 8
	2384	E12	7355	H 3		3380	F 8
	2385	F16	7356	J 4		3381	F10
	2386	F15	7356	L 4		3382	F10
	2387	F15	7356	K 6		3383	B 9
C	2388	G15	7356	L 8		3391	G 3
	2394	D16	7357	C13	I	3395	I 2
	2395	C 3	7362	I11		3396	J 2
	2396	D 3	9380	B 7		3397	I 4
	2397	D 3	9400	I 4		3398	J 3
	2398	B 3	9514	A 7		3399	J 5
D	2399	D 5	9515	H 5		3400	J 2
	2403	K 8			J	3401	K 1
	2404	H 1				3402	K 3
	2405	H 2				3403	K 3
	2406	H 2				3404	K 4
	2407	G 2				3405	L 4
E	2408	G 3			K	3406	K 5
	2410	F 1				3407	K 5
	2415	J 3				3408	K 6
	2416	I 3				3409	L 6
	2417	J 4				3412	K 7
						3413	K 8
						3416	A13
					L	3417	B13
						3418	F13
						3419	G13

22DC594/35X
POWER SUPPLYPART

A4	D1	DOLBY-B/C	C11
A5	A1	DOLBY-ON	C12
A6	A1	EJECT-SWITCH	J10
ALIM-SENSE	D7	FRONT-SENSE	F9
BLINKING-LED	I13	FRTRESET	G16
DECK-SCA	F4	HOLD	J10
ILL-RHEOSTAT	C12	RESET-LATCH	K12
INTBAM	H15	RHEOSTAT	G12
LAMPE-ON/OFF	E9	SDA	G14
OFF-STABIC	E4	SCL	G14
ON/OFF-SWITCH	J10	SECIN	G2
RESET	I11		



1801	I16	6785	A8
2016	B2	6804	G14
2576	G1	6812	J6
2800	E3	6815	C12
2801	C2	6816	E4
2802	B2	6817	J1
2803	B6	6818	G15
2804	C6	6820	I5
2806	B3	7800	D5
2812	D6	7803	B9
2818	G12	7805	D9
2819	J11	7809	E14
2822	J5	7810	G13
2823	K1	7823	D9
2827	G2	7824	C14
2828	E7	7826	H8
2829	E6	7827	D12
2830	F13	7828	I14
2831	I5	7829	H11
2832	C11	9801	A9
2837	H7	9802	H5
2845	J6	9813	D16
2846	K7		
3598	C11		
3805	D3		
3806	E4		
3807	D9		
3808	B9		
3809	C9		
3810	E9		
3811	E8		
3812	D12		
3813	E5		
3816	F11		
3817	G13		
3818	G12		
3819	F13		
3820	C9		
3821	C9		
3822	D8		
3823	D8		
3826	E7		
3827	K7		
3829	D12		
3831	C12		
3833	H10		
3835	J2		
3836	I9		
3837	H10		
3838	A9		
3839	I4		
3840	B14		
3841	D13		
3843	H16		
3844	J6		
3845	I16		
3847	G16		
3848	G16		
3849	K12		
3852	D10		
3854	J6		
3857	I13		
3858	C13		
3862	F2		
3863	G2		
3864	D2		
3869	A12		
3870	E11		
3871	F16		
5100	B6		

1000	A 8	2268	I 4	2387	H 5	2570	B 4	2804	A 2	3261	J 4	3620	D 7
1100	G 8	2269	I 4	2388	H 6	2580	D 5	2806	A 3	3509	H 3	3809	B 2
1250	J 3	2291	I 4	2394	I 1	2583	D 6	2812	B 2	3585	A 4	3820	B 3
1251	C 4	2382	I 2	2396	H 3	2589	B 5	2823	F 2	3610	D 7	3821	B 3
1600	F 5	2383	I 4	2399	H 3	2601	D 3	2830	B 2	3615	C 7	3838	B 3
1801	B 1	2384	I 5	2406	G 7	2603	D 3	2831	G 2	3616	C 6	3840	C 2
2259	I 3	2385	G 5	2418	E 7	2801	A 2	2832	D 6	3617	C 7	3862	D 7
2265	H 3	2386	G 6	2555	D 6	2803	B 3	3260	J 4	3618	C 6	5100	G 3

5350	H 7	6352	H 2	7354	I 6	7809	C 2	9508	C 6	9520	B 8		
5570	B 7	6610	E 6	7356	F 7	9251	C 4	9511	B 5	9600	E 2		
5600	D 3	6611	E 7	7550	A 5	9252	C 3	9513	B 6	9610	E 7		
5601	F 3	6785	B 7	7551	A 7	9253	C 4	9514	D 6	9620	E 7		
5603	E 6	6804	C 1	7601	G 3	9254	C 4	9515	G 7	9801	B 3		
5604	F 2	6815	D 7	7602	G 2	9380	I 6	9516	B 5	9802	G 3		
5605	F 2	7256	C 5	7800	A 3	9400	H 7	9517	A 4	9813	B 1		
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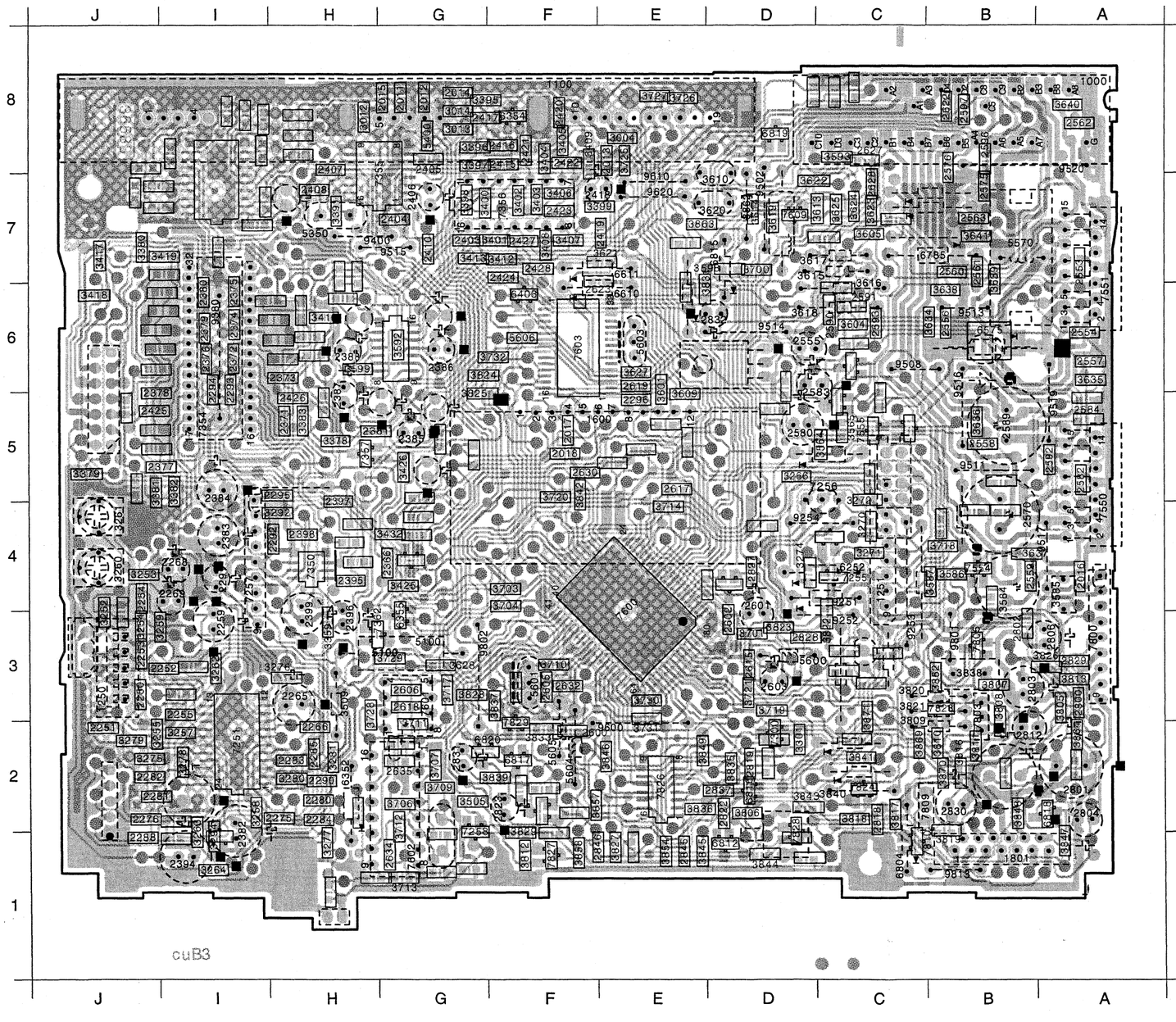


2011	G 8	2584	A 5	3401	F 7	3807	B 3						
2012	G 8	2590	C 6	3402	F 7	3808	B 2						
2013	E 8	2591	C 6	3403	F 7	3810	B 2						
2014	G 8	2592	A 5	3404	F 8	3811	B 2						
2015	G 8	2593	C 6	3405	F 8	3812	F 1						
2016	A 4	2596	B 8	3406	F 7	3813	A 3						
2017	F 5	2597	B 8	3407	F 7	3816	B 2						
2018	F 5	2600	F 2	3408	F 7	3817	C 2						
2250	J 3	2602	D 3	3409	F 8	3818	C 2						
2251	J 2	2605	F 3	3412	F 7	3819	B 1						
2252	I 3	2606	G 3	3413	G 7	3822	C 3						
2253	J 3	2615	D 3	3416	H 6	3823	D 3						
2254	J 4	2617	E 5	3417	J 7	3824	G 6						
2255	I 3	2618	G 3	3418	J 6	3825	G 5						
2266	H 2	2619	E 6	3419	I 7	3826	A 3						
2275	H 2	2622	B 8	3425	G 4	3827	E 1						
2276	J 2	2623	E 6	3426	G 5	3828	G 3						
2280	H 2	2627	C 8	3432	G 4	3829	F 1						
2281	J 2	2628	C 7	3505	G 2	3831	E 6						
2282	J 2	2630	F 5	3564	C 5	3833	F 2						
2283	H 2	2632	F 3	3565	C 5	3835	D 2						
2284	H 2	2634	G 1	3584	B 4	3836	E 2						
2285	H 2	2635	G 2	3586	B 4	3837	F 3						
2288	J 1	2800	A 3	3587	B 4	3839	F 2						
2290	H 2	2802	B 3	3592	G 6	3841	C 2						
2292	H 4	2818	C 2	3593	C 8	3842	F 5						
2293	I 6	2819	D 2	3598	D 7	3843	D 2						
2294	I 6	2822	D 2	3599	H 6	3844	D 1						
2295	H 5	2827	D 4	3601	E 6	3845	E 1						
2296	E 5	2828	D 3	3604	C 6	3846	E 2						
2366	G 4	2829	A 3	3605	C 7	3847	A 1						
2371	H 5	2837	D 2	3609	E 5	3848	B 2						
2372	I 6	2845	E 1	3613	C 7	3849	E 2						
2373	H 6	2846	F 1	3614	D 7	3852	B 3						
2374	I 6	3004	E 8	3619	D 7	3854	E 1						
2375	I 6	3012	H 8	3621	E 7	3857	F 2						
2376	I 6	3013	G 8	3622	D 7	3858	F 1						
2377	I 5	3014	G 8	3623	C 7	3863	E 7						
2378	J 5	3252	J 3	3624	C 7	3864	A 2						
2379	I 6	3253	J 4	3625	C 7	3869	C 2						
2380	I 6	3254	J 3	3627	E 6	3870	B 2						
2381	H 5	3255	J 2	3628	G 3	3871	C 3						
2395	H 4	3257	I 2	3634	B 6	5400	G 8						
2397	H 4	3258	I 2	3635	A 6	5606	F 6						
2398	H 4	3259	J 3	3636	B 5	6354	F 8						
2403	G 7	3262	I 3	3637	B 4	6355	G 3						
2404	G 7	3263	I 1	3638	B 6	6403	F 6						
2405	G 8	3264	I 1	3639	B 6	6575	B 6						
2407	H 8	3266	D 5	3640	A 8	6812	D 1						
2408	H 7	3270	C 4	3641	B 7	6816	D 2						
2410	G 7	3271	C 4	3700	D 7	6817	F 2						
2415	F 8	3272	C 4	3701	D 3	6818	A 2						
2416	F 8	3274	D 4	3703	F 4	6819	D 8						
2417	F 8	3275	J 2	3704	F 4	6820	G 2						
2419	E 7	3276	H 3	3706	G 2	7251	I 2						
2420	F 8	3277	H 1	3707	G 2	7255	C 4						
2421	F 8	3278	I 2	3709	G 2	7258	G 1						
2422	F 8	3279	J 2	3710	F 3	7300	D 2						
2423	F 7	3280	H 2	3711	G 2	7350	H 4						
2424	F 7	3281	H 2	3712	G 2	7355	G 7						
2425	J 5	3292	H 4	3713	G 1	7357	H 5						
2426	H 5	3294	I 1	3714	E 4	7362	H 3						
2427	F 7	3301	D 2	3717	G 3	7554	B 4						
2428	F 7	3359	H 3	3718	B 4	7555	C 5						
2553	A 7	3378	H 5	3719	D 3	7600	E 3						
2554	A 6	3379	J 5	3720	F 5	7603	F 6						
2556	B 6	3380	J 7	3721	D 3	7609	D 7						
2557	A 6	3381	J 5	3725	E 8	7805	B 3						
2558	B 5	3382	I 5	3726	E 8	7810	C 1						
2559	B 4	3383	H 5	3727	E 8	7823	B 3						
2560	B 7	3391	H 7	3728	H 3	7824	C 2						
2561	B 7	3395	F 8	3729	G 3	7826	E 2						
2562	A 8	3396	G 8	3730	E 3	7827	F 1						
2563	B 7	3397	G 8	3731	E 2	7828	D 1						
2575	B 7	3398	G 7	3732	F 6	7829	F 2						
2576	B 8	3399	E 7	3805	A 3								
2582	A 5	3400	G 7	3806	D 2								

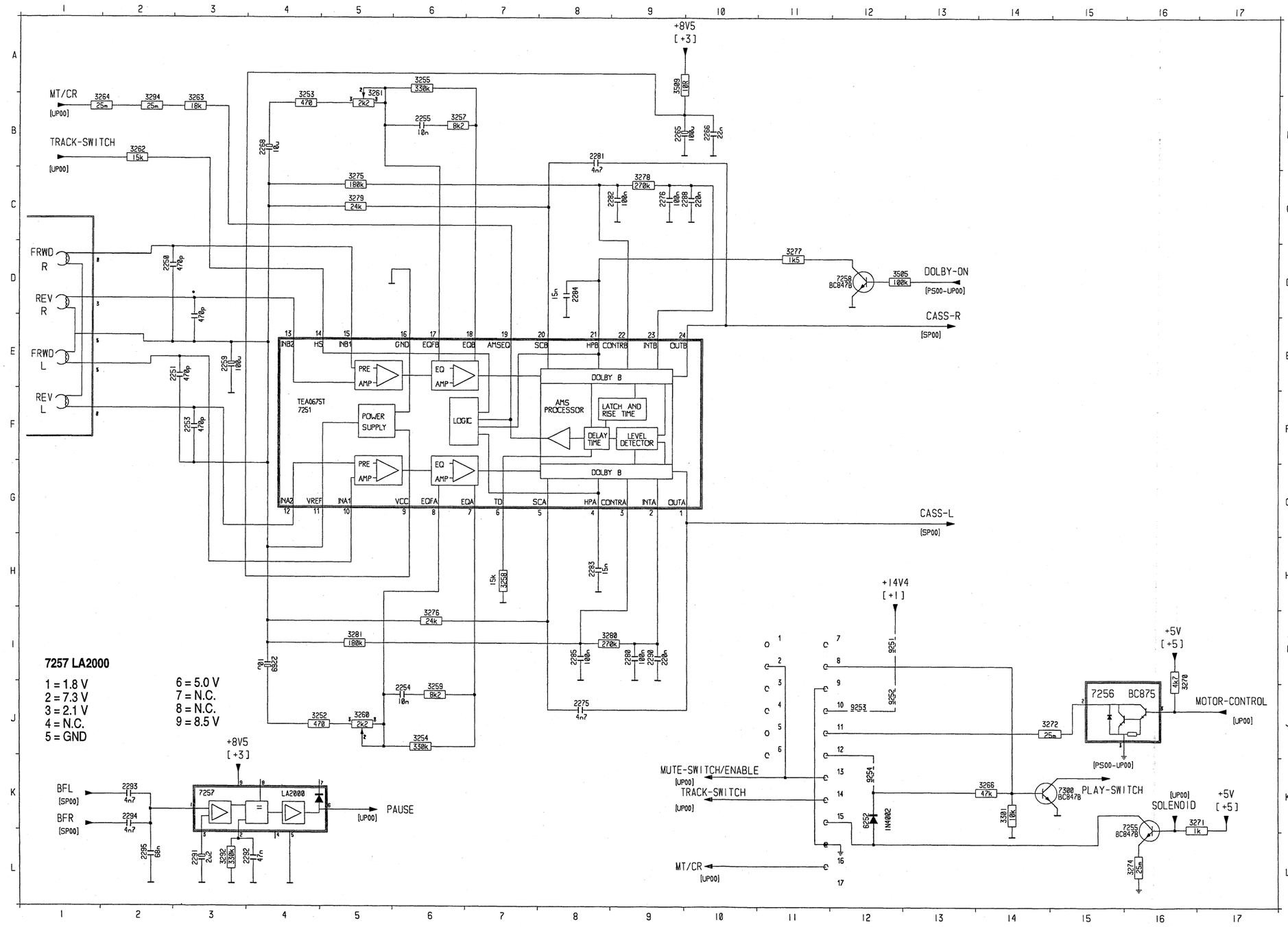
BFL.....K1
BFR.....K1
CASS-L.....D14
CASS-R.....G14

DOLBY-ON.....D14
MOTOR-CONTROL.....J17
MUTE-SWITCH/ENABLE.....K10
MT/CR.....B1/10

PAUSE.....K5
PLAY-SWITCH.....K15
SOLENOID.....K16
TRACK-SWITCH.....B1/K10

22DC594/35X

TAPE PART



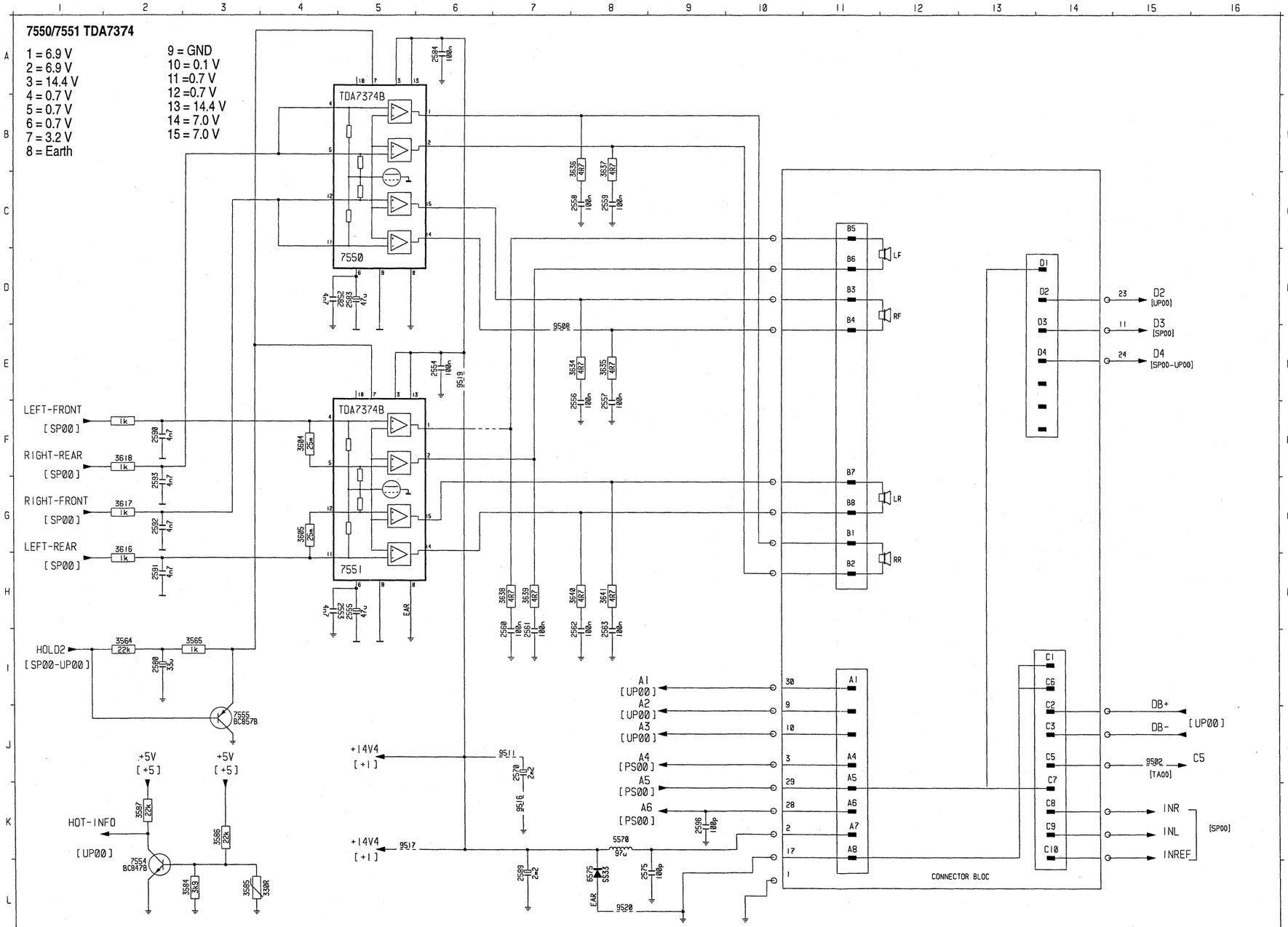
7257 LA2000

1 = 1.8 V
2 = 7.3 V
3 = 2.1 V
4 = N.C.
5 = GND
6 = 5.0 V
7 = N.C.
8 = N.C.
9 = 8.5 V

2250 D 2
2251 E 3
2252 E 3
2253 F 3
2254 J 6
2255 B 6
2259 E 3
2265 B 9
2266 B10
2268 B 4
2269 I 4
2275 J 8
2276 C 9
2280 I 9
2281 B 8
2282 C 9
2283 H 8
2284 D 8
2285 I 8
2288 C10
2290 I 9
2291 L 3
2292 L 4
2293 K 2
2294 K 2
2295 L 2
3252 J 5
3253 B 4
3254 J 6
3255 A 6
3257 B 6
3258 H 7
3259 J 6
3260 J 5
3261 B 5
3262 B 2
3263 B 3
3264 B 2
3266 K14
3270 I16
3271 L17
3272 J15
3274 L16
3275 C 5
3276 I 6
3277 D11
3278 C 9
3279 C 5
3280 I 9
3281 I 5
3292 L 3
3294 B 2
3301 K14
3505 D12
3509 A 9
6252 K12
7251 F 4
7255 L16
7256 J15
7257 K 3
7258 D12
7300 K15
9251 I12
9252 J12
9253 J12
9254 K12

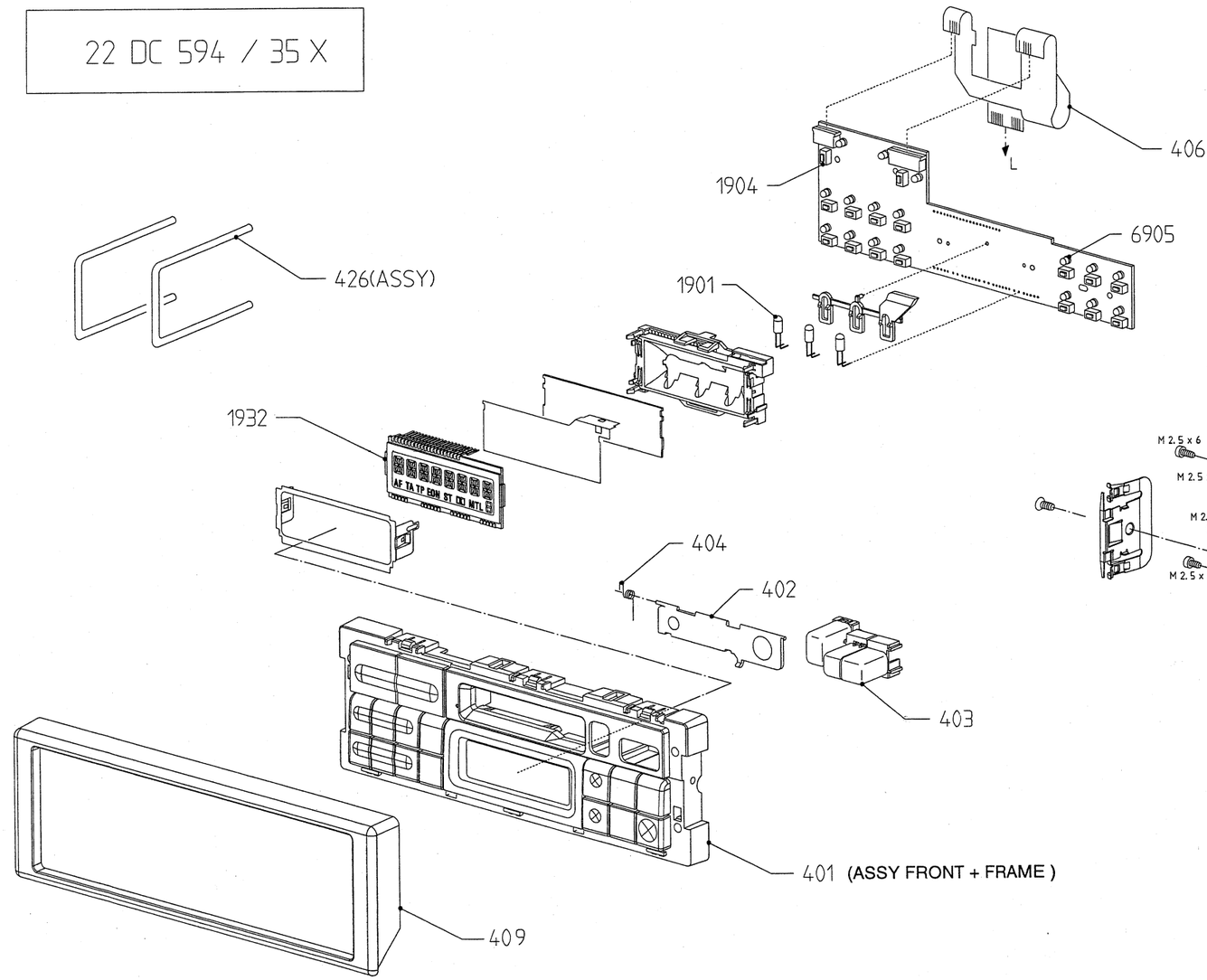
LEFT-FRONT	F1	A1	I9	D2	D15	INR	K15
RIGHT-REAR	F1	A2	J9	D3	D15	INL	K15
RIGHT-FRONT	G1	A3	J9	D4	D15	INREF	K15
LEFT-REAR	H1	A4	J9	DB+	J15		
HOLD2	I1	A5	K9	DB-	J15		
HOT-INFO	K2	A6	K9	C5	J15		

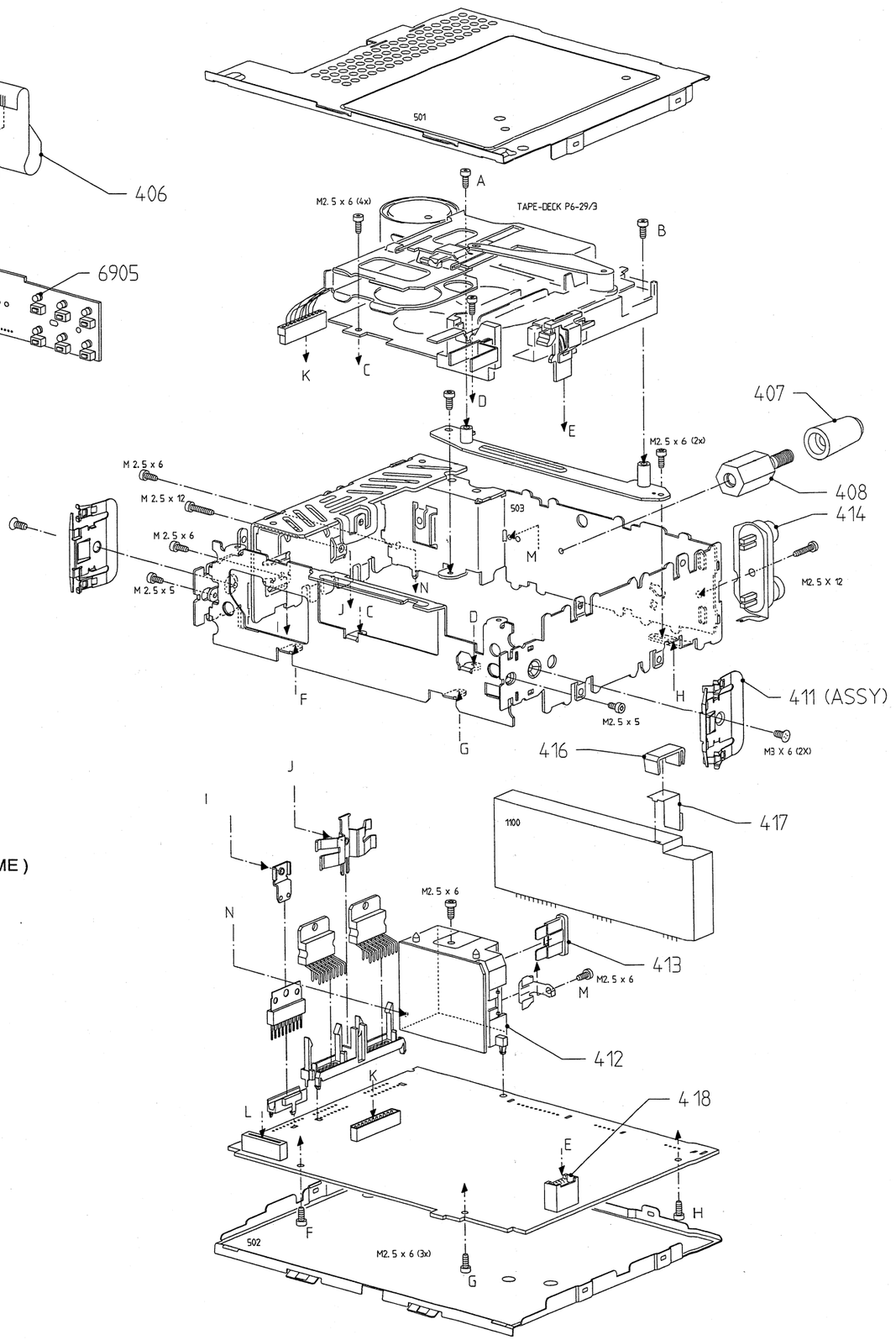
22DC594/35X
POWER AMPLIFIER PART



	1000	I10		2553	H 5		2554	E 6	
A	2555	H 5		2556	F 8		2557	F 8	
	2558	C 8		2559	C 8		2560	I 7	
B	2561	I 7		2562	I 8		2563	I 8	
	2570	J 7		2575	L 8		2580	I 2	
C	2582	D 5		2583	D 5		2584	A 6	
	2589	L 7		2590	F 2		2591	H 2	
D	2592	G 2		2593	G 2		2596	K 9	
	3564	I 2		3565	I 3		3584	L 3	
E	3585	L 3		3586	K 3		3587	K 2	
	3604	F 4		3605	G 4		3616	G 2	
F	3617	G 2		3618	F 2		3634	E 8	
	3635	E 8		3636	B 8		3637	B 8	
G	3638	H 7		3639	H 7		3640	H 8	
	3641	H 8		5570	K 8		6575	L 8	
H	7550	D 5		7551B	H 5		7554	L 2	
	7555	J 3		9502	JI5				
I	9508	E 7		9511	J 7		9516	K 7	
	9517	K 5		9519	E 6				
J	9520	L 8							

22 DC 594 / 35 X





MECHANICAL PARTSLIST					
401	4822 701 13876	ORNAMENTAL PLATE ASSY	409	4822 464 70562	FRONT FRAME
402	4822 443 64165	PAINTED FLAP	411	4822 492 71523	MOUNTING SPRING
403	4822 410 63207	SET OF BUTTONS DECK	412	4822 290 61227	CONNECTOR BLOCK
404	4822 492 42231	FLAP SPRING	413	4822 071 21003	FUSE 10A
406	4822 466 10658	FLEX FOIL	414	4822 267 31702	AERIAL BUSH ASSY
407	4822 532 12177	RUBBER SPACER	416	4822 404 21276	HOOK IC91
408	4822 462 72016	METAL SPACER REAR	417	4822 492 71412	SPRING GROUNDING IC91

Miscellaneous		
1100	4822 214 52249	IC91 MODULE
1600	4822 214 52251	THICK FILM BAM
1901	4822 134 41184	LAMP 12V 60MA ORANGE
1902	4822 134 41184	LAMP 12V 60MA ORANGE
1903	4822 134 41184	LAMP 12V 60MA ORANGE
1904	4822 276 13103	SWITCH
1905	4822 276 13103	SWITCH
1906	4822 276 13103	SWITCH
1907	4822 276 13103	SWITCH
1908	4822 276 13103	SWITCH
1909	4822 276 13103	SWITCH
1910	4822 276 13103	SWITCH
1911	4822 276 13103	SWITCH
1912	4822 276 13103	SWITCH
1913	4822 276 13103	SWITCH
1914	4822 276 13103	SWITCH
1915	4822 276 13103	SWITCH
1916	4822 276 13103	SWITCH
1917	4822 276 13103	SWITCH
1918	4822 276 13103	SWITCH
1919	4822 276 13103	SWITCH
1932	4822 130 91347	LCD ASSY

2011	5322 122 34098	10NF10%X7R 63V
2012	5322 122 34098	10NF10%X7R 63V
2013	5322 126 10223	4,7NF10%X7R 63V
2014	5322 126 10223	4,7NF10%X7R 63V
2015	5322 122 34123	1NF10%X7R 50V
2016	5322 122 34123	1NF 10% 63V 0805
2017	5322 122 33538	150PF 5%
2018	5322 122 33538	150PF 5%
2250	5322 122 32268	470P 5% 0805 NP0
2251	5322 122 32268	470P 5% 0805 NP0
2252	5322 122 32268	470P 5% 0805 NP0
2253	5322 122 32268	470P 5% 0805 NP0
2254	5322 122 34098	10NF10%X7R 63V
2255	5322 122 34098	10NF10%X7R 63V
2259	4822 124 80453	100UF20% 10V
2265	4822 124 80453	100UF20% 10V
2266	5322 122 32654	22NF10%X7R 63V
2268	4822 124 41017	10UF 16V
2269	4822 124 41017	10UF 16V
2275	5322 126 10223	4N7 5% 63V 0805
2276	4822 126 13196	100N 10% 25V 0805
2280	4822 126 13196	100N 10% 25V 0805
2281	5322 126 10223	4N7 5% 63V 0805
2282	4822 126 13196	100N 10% 25V 0805
2283	4822 126 13188	15NF 5% 63V 0805
2284	4822 126 13188	15NF 5% 63V 0805
2285	4822 126 13196	100N 10% 25V 0805
2288	4822 126 13057	220NF10% X7R 25V
2290	4822 126 13057	220NF10% X7R 25V
2291	4822 124 23504	2.2UF20% 50V
2292	4822 126 13343	47N 10% 25V 0805
2293	5322 126 10223	4,7NF10%X7R 63V
2294	5322 126 10223	4,7NF10%X7R 63V
2295	4822 122 33342	33NF10%X7R 63V
2296	4822 126 13196	100NF 10% X7R
2366	5322 122 34098	10N 10% 63V 0805

2371	4822 126 10525	8N2 10% X7R 0805
2372	4822 126 13057	220NF10% X7R 25V
2373	4822 126 13196	100N 10% 25V 0805
2374	4822 122 33342	33NF10%X7R 63V
2375	4822 122 32646	5,6NF10%X7R 50V
2376	4822 126 13057	220NF10% X7R 25V
2377	4822 126 10525	8N2 10% X7R 0805
2378	4822 126 13196	100N 10% 25V 0805
2379	4822 122 33342	33NF10%X7R 63V
2380	4822 122 32646	5,6NF10%X7R 50V
2381	5322 122 34098	10NF10%X7R 63V
2382	4822 124 23582	220UF 20% 10V
2383	4822 124 22646	47UF20% 16V
2384	4822 124 80453	100UF20% 10V
2385	4822 124 23504	2.2UF20% 50V
2386	4822 124 23504	2.2UF20% 50V
2387	4822 124 23504	2.2UF20% 50V
2388	4822 124 23504	2.2UF20% 50V
2394	4822 124 23582	220UF 20% 10V
2395	4822 126 13057	220N 10% 25V 1206
2396	4822 124 23279	22UF 20% 16V
2397	4822 126 13057	220N 10% 25V 1206
2398	4822 126 13196	100N 10% 25V 0805
2399	4822 124 22646	47UF 20% 16V
2403	5322 122 32448	10PF 5% 50V
2404	4822 126 13057	220NF10% X7R 25V
2405	5322 116 80853	560PF 5%NP0 63V
2406	4822 124 23504	2.2UF20% 50V
2407	5322 122 32452	47PF 5%NP0 63V
2408	4822 122 33515	82pF 5% NP0 0805
2410	5322 122 31863	330PF 5% NP0 0805
2415	4822 122 32614	1.2NF 10% X7R 50V
2416	5322 122 31865	1,5NF10%X7R 63V
2417	5322 122 34098	10N 10% 63V 0805
2418	4822 124 80765	4U7 20% 35V
2419	4822 126 13057	220NF10% X7R 25V
2420	5322 122 33538	150PF 5% NP0 0805
2421	5322 122 33538	150PF 5% NP0 0805
2422	5322 122 33538	150PF 5% NP0 0805
2423	5322 122 33538	150PF 5% NP0 0805
2424	5322 122 34123	1NF10%X7R 50V
2425	4822 126 13343	47N 10% 25V 0805
2426	4822 126 13343	47N 10% 25V 0805
2427	4822 122 32636	390PF 5%SL 50V
2428	5322 122 32654	22NF10%X7R 63V
2553	5322 126 10223	4,7NF10%X7R 63V
2554	4822 122 33496	100NF10%X7R 63V
2555	5322 124 41938	47MU 6V3
2556	4822 126 13196	100N 10% 25V 0805
2557	4822 126 13196	100N 10% 25V 0805
2558	4822 126 13196	100N 10% 25V 0805
2559	4822 126 13196	100N 10% 25V 0805
2560	4822 126 13196	100N 10% 25V 0805
2561	4822 126 13196	100N 10% 25V 0805
2562	4822 126 13196	100N 10% 25V 0805
2563	4822 126 13196	100N 10% 25V 0805
2570	4822 124 80863	2200UF 20% 16V
2575	5322 122 32531	100PF 5%NP0 50V
2576	5322 122 32531	100PF 5%NP0 50V
2580	4822 124 23281	33UF20% 16V

2582	5322 126 10223	4,7NF10%X7R 63V
2583	5322 124 41938	47MU 6V3
2584	4822 122 33496	100NF10%X7R 63V
2589	4822 124 80863	2200UF 20% 16V
2590	5322 126 10223	4,7NF10%X7R 63V
2591	5322 126 10223	4,7NF10%X7R 63V
2592	5322 126 10223	4,7NF10%X7R 63V
2593	5322 126 10223	4,7NF10%X7R 63V
2596	5322 122 32531	100PF 5%NP0 50V
2597	4822 122 33342	33NF10%X7R 63V
2600	5322 122 32654	22NF10%X7R 63V
2601	4822 124 22646	47UF 20% 16V
2602	4822 126 13196	100N 10% 25V 0805
2603	4822 124 41017	10UF 16V
2605	5322 122 32658	22PF 5% 63V 0805
2606	4822 126 13196	100N 10% 25V 0805
2615	4822 122 33342	33NF10%X7R 63V
2617	4822 122 33342	33NF10%X7R 63V
2618	5322 122 32654	22NF10%X7R 63V
2619	4822 126 13196	100N 10% 25V 0805
2622	5322 122 34123	1NF10%X7R 50V
2623	4822 126 13196	100N 10% 25V 0805
2627	5322 122 34123	1NF10%X7R 50V
2628	5322 122 34123	1NF10%X7R 50V
2630	5322 122 34123	1NF10%X7R 50V
2632	5322 122 32268	470PF 10% 50V
2634	5322 122 32531	100P 5% 63V 0805
2635	5322 126 10223	4N7 10% 63V 0805
2800	4822 126 13343	47N 10% 25V 0805
2801	4822 124 40201	1000UF20% 16V
2802	4822 126 13057	220NF10% X7R 25V
2803	4822 124 22646	47UF20% 16V
2804	4822 124 22646	47UF 20% 16V
2806	4822 124 22861	47UF 16V
2812	4822 124 22646	47UF 20% 16V
2818	5322 122 34098	10NF10%X7R 63V
2819	5322 122 32654	22NF10%X7R 63V
2822	5322 122 34098	10NF10%X7R 63V
2823	4822 124 23282	1UF 20% 50V
2827	5322 122 34123	1NF 10% 63V 0805
2828	5322 122 34123	1NF 10% 63V 0805
2829	5322 122 32654	22NF10%X7R 63V
2830	4822 124 22646	47UF20% 16V
2831	4822 124 80765	4U7 20% 35V
2832	4822 124 41017	10UF 16V
2837	4822 122 33342	33NF10%X7R 63V
2845	5322 122 34098	10NF10%X7R 63V
2846	5322 122 34098	10N 10% 63V 0805
2901	4822 126 13057	220NF10% X7R 25V
2902	5322 122 33869	15PF 5%NP0 63V
2903	5322 122 33869	15PF 5%NP0 63V
2904	4822 126 13057	220NF10% X7R 25V
2905	4822 126 13196	100N 10% X7R
2906	4822 126 13196	100N 10% X7R
2907	4822 126 13196	100N 10% X7R

3004	4822 051 20153	15K 5% 0,1W
3012	4822 051 20102	1K00 5% 0,1W
3013	4822 051 20223	22K00 5% 0,1W

3014	4822 051 20104	100K00 5% 0,1W
3252	4822 051 20471	470R00 5% 0,1W
3253	4822 051 20471	470R00 5% 0,1W
3254	4822 051 20334	330K00 5% 0,1W
3255	4822 051 20334	330K00 5% 0,1W
3257	4822 051 20822	8K20 5% 0,1W
3258	4822 051 20153	15K00 5% 0,1W
3259	4822 051 20822	8K20 5% 0,1W
3260	4822 101 11166	POT LIN 2K2
3261	4822 101 11166	POT LIN 2K2
3262	4822 051 20153	15K00 5% 0,1W
3263	4822 051 20183	18K00 5% 0,1W
3264	4822 051 20008	CHIP JUMPER MAX 0R05
3266	4822 051 20473	47K00 5% 0,1W
3270	4822 051 20472	4K70 5% 0,1W
3271	4822 051 20102	1K00 5% 0,1W
3272	4822 051 20008	CHIP JUMPER MAX 0R05
3274	4822 051 20008	CHIP JUMPER MAX 0R05
3275	4822 051 20184	180K00 5% 0,1W
3276	4822 117 10507	24K 1% RC12H 0805
3277	4822 117 11139	1K5 1% 0,1W
3278	4822 051 20274	270K00 5% 0,1W
3279	4822 117 10507	24K 1% RC12H 0805
3280	4822 051 20274	270K00 5% 0,1W
3281	4822 051 20184	180K00 5% 0,1W
3292	4822 051 20334	330K00 5% 0,1W
3294	4822 051 20008	CHIP JUMPER MAX 0R05
3301	4822 051 20103	10K00 5% 0,1W
3359	4822 051 20105	1M 5% RC11 0805
3378	4822 051 20222	2K2 5% RC11 0805
3379	4822 051 20102	1K00 5% 0,1W
3380	4822 051 20102	1K00 5% 0,1W
3381	4822 051 20223	22K00 5% 0,1W
3382	4822 051 20222	2K2 5% RC11 0805
3383	4822 051 20223	22K00 5% 0,1W
3391	4822 051 20471	470R 5% RC11 0805
3395	4822 051 20332	3K30 5% 0,1W
3396	4822 051 20561	560R00 5% 0,1W
3397	4822 051 20683	68K00 5% 0,1W
3398	4822 051 20103	10K00 5% 0,1W
3399	4822 051 20103	10K 5% RC11 0805
3400	4822 051 20332	3K30 5% 0,1W
3401	4822 051 20332	3K30 5% 0,1W
3402	4822 051 20103	10K00 5% 0,1W
3403	4822 051 20393	39K00 5% 0,1W
3404	4822 051 20393	39K00 5% 0,1W
3405	4822 051 20183	18K00 5% 0,1W
3406	4822 051 20103	10K00 5% 0,1W
3407	4822 051 20393	39K00 5% 0,1W
3408	4822 051 20393	39K00 5% 0,1W
3409	4822 051 20103	10K00 5% 0,1W
3412	4822 051 20393	39K00 5% 0,1W
3413	4822 051 20224	220K00 5% 0,1W
3416	4822 051 20008	0R00 JUMP. (0805)
3417	4822 051 20008	0R00 JUMP. (0805)
3418	4822 051 20008	0R00 JUMP. (0805)
3419	4822 051 20008	0R00 JUMP. (0805)
3425	4822 051 20224	220K00 5% 0,1W
3426	4822 051 20224	220K00 5% 0,1W
3432	4822 051 20224	220K00 5% 0,1W

22DC594/35X

3505	4822 051 20104	100K00 5% 0,1W
3509	4822 116 52176	10R 5% MET FLM SFR16
3564	4822 051 20223	22K00 5% 0,1W
3565	4822 051 20102	1K00 5% 0,1W
3584	4822 051 20392	3K90 5% 0,1W
3585	4822 116 40254	330R 16V DC PTH9
3586	4822 051 20223	22K00 5% 0,1W
3587	4822 051 20223	22K00 5% 0,1W
3592	4822 051 20008	0R00 JUMP. (0805)
3593	4822 051 20008	0R00 JUMP. (0805)
3598	4822 051 20472	4K70 5% 0,1W
3599	4822 051 20008	0R00 JUMP. (0805)
3601	4822 051 20008	0R00 JUMP. (0805)
3604	4822 051 20008	0R00 JUMP. (0805)
3605	4822 051 20008	0R00 JUMP. (0805)
3609	4822 051 20008	0R00 JUMP. (0805)
3610	4822 116 40221	8R2 20%
3613	4822 051 20333	33K00 5% 0,1W
3614	4822 051 20104	100K00 5% 0,1W
3615	4822 116 83863	1K 5% 0,5W
3616	4822 116 83863	1K 5% 0,5W
3617	4822 116 83863	1K 5% 0,5W
3618	4822 116 83863	1K 5% 0,5W
3619	4822 051 20222	2K20 5% 0,1W
3620	4822 116 40221	8R2 20%
3621	4822 051 20101	100R00 5% 0,1W
3622	4822 051 20104	100K00 5% 0,1W
3623	4822 051 20104	100K00 5% 0,1W
3624	4822 051 20331	330R00 5% 0,1W
3625	4822 051 20331	330R00 5% 0,1W
3627	4822 051 20102	1K00 5% 0,1W
3628	4822 051 20008	0R00 JUMP. (0805)
3634	4822 051 20478	4R7 5% 0805
3635	4822 051 20478	4R7 5% 0805
3636	4822 051 20478	4R7 5% 0805
3637	4822 051 20478	4R7 5% 0805
3638	4822 051 20478	4R7 5% 0805
3639	4822 051 20478	4R7 5% 0805
3640	4822 051 20478	4R7 5% 0805
3641	4822 051 20478	4R7 5% 0805
3700	4822 051 20103	10K00 5% 0,1W
3701	4822 051 20101	100R00 5% 0,1W
3703	4822 051 20103	10K00 5% 0,1W
3704	4822 051 20103	10K00 5% 0,1W
3706	4822 051 20008	0R00 JUMP. (0805)
3707	4822 051 20008	0R00 JUMP. (0805)
3709	4822 051 20153	15K 5% RC11 0805
3710	4822 051 20471	470R00 5% 0,1W
3711	4822 051 20153	15K00 5% 0,1W
3712	4822 051 20008	CHIP JUMPER 0R05 MAX
3713	4822 051 20473	47K 5% RC11 0805
3714	4822 051 20473	47K00 5% 0,1W
3717	4822 051 20103	10K00 5% 0,1W
3718	4822 051 20472	4K70 5% 0,1W
3719	4822 051 20153	15K00 5% 0,1W
3720	4822 051 20102	1K00 5% 0,1W
3721	4822 051 20153	15K00 5% 0,1W
3725	4822 051 20104	100K 5% 0,1W
3726	4822 051 20101	100R00 5% 0,1W
3727	4822 051 20101	100R00 5% 0,1W

3728	4822 051 20103	10K00 5% 0,1W
3729	4822 051 20103	10K00 5% 0,1W
3730	4822 051 20153	15K00 5% 0,1W
3731	4822 051 20473	47K00 5% 0,1W
3732	4822 051 20103	10K00 5% 0,1W
3805	4822 051 20473	47K00 5% 0,1W
3806	4822 051 20102	1K00 5% 0,1W
3807	4822 051 20103	10K00 5% 0,1W
3808	4822 051 20103	10K00 5% 0,1W
3809	4822 116 83863	1K 5% 0,5W
3810	4822 051 20103	10K00 5% 0,1W
3811	4822 051 20473	47K00 5% 0,1W
3812	4822 051 20153	15K00 5% 0,1W
3813	4822 051 20473	47K00 5% 0,1W
3816	4822 051 20102	1K00 5% 0,1W
3817	4822 051 20103	10K00 5% 0,1W
3818	4822 051 20103	10K00 5% 0,1W
3819	4822 051 20102	1K00 5% 0,1W
3820	4822 116 83863	1K 5% 0,5W
3821	4822 116 83863	1K 5% 0,5W
3822	4822 051 20224	220K00 5% 0,1W
3823	4822 051 20104	100K00 5% 0,1W
3824	4822 051 20103	10K00 5% 0,1W
3825	4822 051 20103	10K00 5% 0,1W
3826	4822 051 20223	22K00 5% 0,1W
3827	4822 051 20333	33K00 5% 0,1W
3828	4822 051 20103	10K00 5% 0,1W
3829	4822 051 20153	15K00 5% 0,1W
3831	4822 051 20222	2K20 5% 0,1W
3833	4822 051 20103	10K00 5% 0,1W
3835	4822 051 20104	100K00 5% 0,1W
3836	4822 051 20474	470K00 5% 0,1W
3837	4822 051 20103	10K00 5% 0,1W
3838	4822 116 40267	3R3 25% 20V
3839	4822 051 20104	100K 5% RC11 0805
3840	4822 116 52215	220R 5% CRB R-20
3841	4822 051 20474	470K00 5% 0,1W
3842	4822 051 20103	10K00 5% 0,1W
3843	4822 051 20102	1K00 5% 0,1W
3844	4822 051 20473	47K00 5% 0,1W
3845	4822 051 20102	1K00 5% 0,1W
3847	4822 051 20471	470R00 5% 0,1W
3848	4822 051 20471	470R00 5% 0,1W
3849	4822 051 20103	10K00 5% 0,1W
3852	4822 051 20102	1K00 5% 0,1W
3854	4822 051 20473	47K00 5% 0,1W
3857	4822 051 20104	100K00 5% 0,1W
3858	4822 051 20103	10K00 5% 0,1W
3862	4822 116 83874	220K 5% 0,5W
3863	4822 051 20104	100K00 5% 0,1W
3864	4822 051 20478	4R70 5% 0,1W
3869	4822 051 20008	0R00 JUMP. (0805)
3870	4822 051 20008	0R00 JUMP. (0805)
3871	4822 051 20473	47K 5% RC11 0805
3901	4822 051 20561	560R00 5% 0,1W
3902	4822 051 20561	560R00 5% 0,1W
3903	4822 051 20561	560R00 5% 0,1W
3904	4822 051 20561	560R00 5% 0,1W
3905	4822 051 20561	560R00
3906	4822 051 20561	560R00

3907	4822 051 20561	560R00
3908	4822 051 20561	560R00
3909	4822 051 20561	560R00
3910	4822 051 20561	560R00
3911	4822 051 20102	1K00 5% 0,1W
3912	4822 051 20102	1K00 5% 0,1W
3913	4822 051 20104	100K00 5% 0,1W
3914	4822 051 20471	470R00 5% 0,1W
3915	4822 051 20224	220K00 5% 0,1W
3916	4822 051 20102	1K00 5% 0,1W
3917	4822 051 20184	180K00 5% 0,1W
3918	4822 051 20109	10R00 5% 0,1W
3919	4822 051 20153	15K00 5% 0,1W
3920	4822 051 20153	15K00 5% 0,1W
3921	4822 051 20153	15K00 5% 0,1W
3922	4822 051 20153	15K00 5% 0,1W
3923	4822 051 20104	100K00 5% 0,1W

5100	4822 157 71433	IND 120UH 10% LAL05
5350	4822 242 80259	LN-G8-311(TPR11)
5400	4822 157 71206	IND FXD SM 100MHZ
5570	4822 157 70935	
5600	4822 157 52983	22UH 10%
5601	4822 242 81959	CER RES 11MHZ5
5603	4822 242 81002	CST6,00MGW-TF01
5604	4822 157 60122	
5605	4822 157 60122	
5606	4822 157 71206	IND FXD SM 100MHZ
5901	4822 242 81855	SM CER RES 12MHZ

6250	5322 130 30684	1N4002GP
6252	5322 130 30684	1N4002GP
6352	5322 130 30684	1N4002GP
6354	5322 130 34337	BAV99
6355	5322 130 31928	BAS16
6403	5322 130 34337	BAV99
6570	4822 130 82465	1.5KE27P
6575	4822 130 70052	SM DIO SS33
6610	4822 130 32904	BZV85-C5V6
6611	4822 130 32904	BZV85-C5V6
6785	5322 130 30684	1N4002GP
6804	4822 130 34195	BZX79-C13
6812	5322 130 31928	BAS16
6815	4822 130 34173	BZX79-C5V6
6816	5322 130 31928	BAS16
6817	5322 130 34337	BAV99
6818	5322 130 34331	BAV70
6819	5322 130 31928	BAS16
6820	5322 130 34337	DIO SIG SM BAV99
6901	4822 130 83959	TLHR4900AS
6902	4822 130 83118	TLHP4401
6903	4822 130 83118	TLHP4401
6904	4822 130 83118	TLHP4401
6905	4822 130 83118	TLHP4401
6906	4822 130 83118	TLHP4401
6907	4822 130 83118	TLHP4401
6908	4822 130 83118	TLHP4401
6909	4822 130 83118	TLHP4401

6910	4822 130 83118	TLHP4401
6911	4822 130 83118	TLHP4401
6912	4822 130 83118	TLHP4401
6913	4822 130 83118	TLHP4401
6914	4822 130 83118	TLHP4401
6915	4822 130 83118	TLHP4401
6916	4822 130 83118	TLHP4401
6917	4822 130 83118	TLHP4401

7251	4822 209 32744	TEA0675T/V1
7255	4822 130 60511	BC847B
7256	5322 130 61677	BC875
7257	4822 209 83159	LA2000
7258	4822 130 60511	BC847B
7300	4822 130 60511	BC847B
7350	4822 209 33985	IC SM TDA8579T/N1
7354	4822 209 32745	TEA6320/V1
7355	4822 209 31981	SAA6579T/V1
7356	4822 209 32742	TL074IN
7357	4822 130 60511	BC847B
7362	5322 130 60508	BC857B
7550	4822 209 90404	TDA7374B
7551	4822 209 90404	TDA7374B
7554	4822 130 60511	BC847B
7555	5322 130 60508	BC857B
7600	4822 209 13045	P83CE558EFB/046
7601	4822 900 10563	EEPROM SEC CODE
7602	5322 209 10468	HEF4521BP
7603	4822 209 32743	MSM6307GS
7609	4822 130 60511	BC847B
7800	4822 209 33029	TDA3602/N3
7803	4822 130 40995	T BD438
7805	4822 130 60511	BC847B
7809	5322 130 44786	BD675
7810	4822 130 60511	BC847B
7823	4822 130 60511	BC847B
7824	4822 130 60511	BC847B
7826	4822 209 12628	HEF4044BT
7827	5322 130 60508	BC857B
7828	5322 130 60508	BC857B
7829	5322 130 60508	BC857B
7901	4822 209 33362	P83C528FFB/079
7902	5322 209 11129	PCF8576T
7903	4822 130 60511	BC847B
7904	4822 130 60511	BC847B

22DC594/35X

Car cassette deck P6

Version P6-29/1
Version P6-29/3

Service
Service
Service

ERSATZTEILE
für Philips Car Systems
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KiVi Service GmbH
Windmühlenstr. 41 · 31178 Giesen/Emmerke
Tel.: 0 51 21 / 6 00 20 · Fax 0 51 21 / 60 02 54

PHIL-05024

Service Manual

12 V

For this version, please refer to the Service Manual P6 version 16 (from week 409) with following exceptions: +4796
the motor has been mounted at the left side, the playback head has been replaced by a Dolby version (only P6-29/3), MSS has been added (only P6-29/3).
These deviations have been incorporated in the exploded view and in the complete list of parts.

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PHILIPS

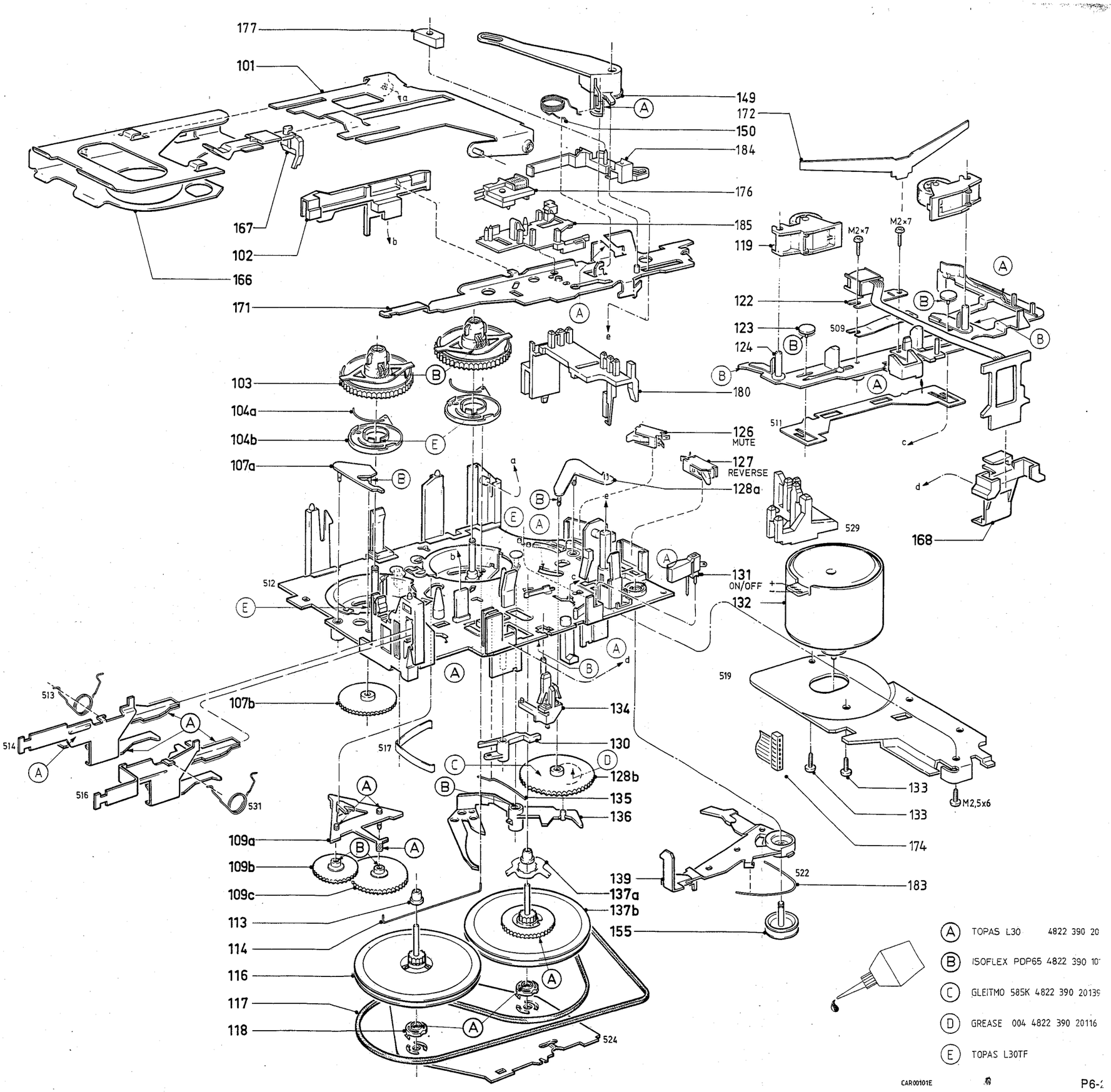
5024

A	4822 390 10107	
B	4822 390 20128	
C	4822 390 20139	
D	4822 390 20116	
E		
101	4822 466 81479	
102	4822 462 30242	
103	4822 466 70526	
104	4822 466 70527	
107	4822 522 20325	
109	4822 522 20327	
113	4822 520 30406	
114	4822 492 90076	
116	4822 528 80985	
117	4822 358 31136	
118	4822 520 30407	
119	4822 403 40157	
122	4822 249 30117	P6-29/1
122	4822 249 30124	P6-29/3
123	4822 528 80983	
124	4822 459 80209	
126	4822 277 10749	
127	4822 277 10748	
128	4822 522 20326	
131	4822 276 13081	
130	4822 403 52509	
132	4822 361 21075	
133	4822 502 12548	
134	4822 430 10225	
135	4822 492 63217	
136	4822 403 52031	
137	4822 528 80984	
139	4822 404 21169	
149	4822 404 20568	
150	4822 492 41275	
155	4822 528 81144	
166	4822 404 20593	
167	4822 404 20585	
168	4822 256 91801	
171	4822 404 20951	P6-29/1
171	4822 404 21174	P6-29/3
172	4822 492 63216	
174	4822 321 62427	P6-29/1
174	4822 321 62428	P6-29/3
176	4822 281 50113	P6-29/3
177	4822 281 60165	P6-29/3
180	4822 256 91799	
183	4822 492 71064	
184	4822 404 21295	P6-29/3
185	4822 466 83076	P6-29/3

Deck complete:

P6-29/1	4822 701 13819
P6-29/3	4822 701 13818

PCS 74 112



4796

Auto cassette deck P6

Version 16

Service
Service
Service

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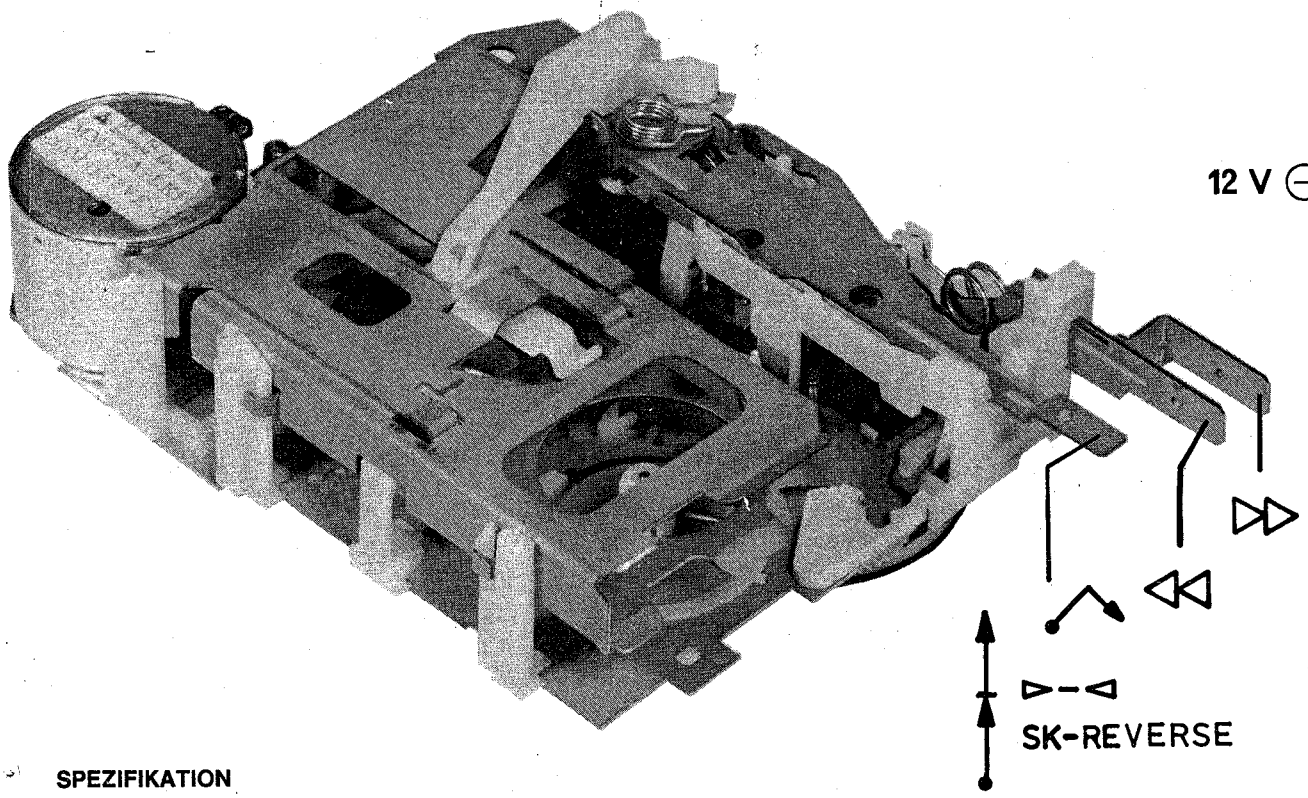
Service Manual



36027 A12

SPEZIFIKATION

Bandgeschwindigkeit	: 4.76 cm/s ± 2% (10-45°C)
Arbeitsspannung	: 8.4-15 V
Gleichlaufschwankungen	: ≤0.3% (10-45°C)
Uebersprechen	: ≥35 dB (1 kHz)
Umspuldauer (C60)	: ≤120 sec.
Spurenzahl	: 2 x 2

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4796

LAUFWERKFUNKTION (Bilder 1...5)

In genannten Bildern sind mit Pfeilen die Bewegungen gekennzeichnet, welche die teile bei einem bestimmten Vorgang ausführen.
In den beigelegten Tabellen ist die Bewegungsfolge festgelegt, wie sie in den Bildern gelesen werden soll.
Es wurde folgende Richtlinie zugrundegelegt:

1 → 3, 2 : Bewegung zweier verschiedener Teile

1 → 2, 2a : Bewegung nur eines Bauteils, das sich mit mehreren Teilen aufbaut und das wegen der Deutlichkeit des Bildes an mehreren Stellen Zeichnerisch dargestellt ist.
-(etwa die Friktion).

Bild 1 zeigt die Ausgangsstellung
Bild 2...5 sind das Ergebnis der in Bild 1 ausgeführten Bewegungen (Cassette ist also eingelegt, das Laufwerk befindet sich in Wiedergabestellung).

INSTANDHALTUNG

Es empfiehlt sich, das Laufwerk in regelmässigen Zeitabständen zu reinigen und an den wichtigsten Stellen zu schmieren.

1. Reinigen mit Alkohol oder Spiritus

- Wiedergabeknopf
- Tonwellen
- Andruckrollen
- Seilrollen

Zum Reinigen von Kopf, Druckrolle und Tonwelle kann auch eine s.g. "drop-in"-Reinigungscassette (SBC114-4822 389 20015) benutzt werden.

2. Schmiervorschrift

- Siehe Explosionsansicht 42312E.

REPARATURHINWEISE

An einigen Stellen sind Bauteille durch Kunststoffnocken verriegelt.
Zum Ausbau dieser Bauteile müssen die Nocken verbogen, verdreht usw. werden.
Die Zahnräder 107b, 128b und die Druckrollenbügel 119 sind durch eine Einschnapverbindung an den Achsen befestigt. Mit Hilfe eines Schraubenziehers lassen sich diese Bauteile ausbauen.
Wenn Zahnrad 107b (oder 128b) ausgewechselt wird, ist auch der zugehörige Bügel 107a (oder 128a) auszuwechseln.
Auswechseln der genannten Bauteile siehe Bildern 6...10.

EINSTELLUNGEN UND KONTROLLEN

Benötigte Messgeräte

- Universal-Testcassette SBC419 - 4822 397 30069
- Universal-Testcassette SBC420 - 4822 397 30071
- Friktions-Testcassette 4822 395 30054
- Wechselspannungs-Millivoltmeter
- Federwaage 3-55 p
- Gleichlaufanalysator

1. Azimut (Bilder 11 und 12)

- Beide Lautsprecherausgänge mit 4 Ω belasten.
- An beide Lautsprecherausgänge ein Wechselspannungs-Millivoltmeter schalten.
- Mit Hilfe einer Testcassette SBC419 oder SBC420 das 10-kHz-Signal wiedergeben.
- Schraube A auf den Mittelwert der Höchst-Ausgangsspannungen einstellen.
- Die Differenz zwischen beiden Kanälen darf zuhöchst 4 dB betragen.
- Auf Stellung "reverse" umschalten.
- Falls der gemessene Wert vom bereits gemessenen Wert abweicht das Lager 118 im vorderen Schwungrad ("reverse") verdrehen.

2. Friktionen

- Friktions-Testcassette in das Gerät einlegen. Die Aufwickelfriktion muss für beide Richtungen 55-70 pcm betragen, gemessen nach einer Einlaufdauer von 2 Minuten.
- Der Gegenzug muss für beide Richtungen 4,5-7,5 pcm betragen.
- Bei einem abweichenden Wert muss die entsprechende Aufwickelfriktion oder der entsprechende Gegenzug ausgewechselt werden.
- Die Aufwickelfriktion (SVL) muss 80-130 pcm sein (bei trockenem Wetter: niedriger Wert; bei feuchtem Wetter: hoher Wert).
  Einem zu hohen Wert ist abzuhelfen, dadurch dass Blattfeder 137a an den 3 Enden mit einem stumpfen Kunststoffstäbchen ein wenig zusammengedrückt wird.

3. Andruckrolle 119

- Kontrolle nach Bild 13.

Der Andruckrollendruck ist nicht einstellbar. Bei einem abweichenden Wert muss Feder 172 ausgewechselt werden.

4. Gleichlaufschwankungen/Bandgeschwindigkeit

Es muss mit dem Autoradio komplett kontroliert werden, und zwar wie folgt.

- Gleichlaufanalysator an die Lautsprecherausgänge schalten
- Testcassette SBC419 oder SBC420 einlegen und das 3150-Hz-Signal wiedergeben.
- Der Jaulwert muss ⩽ 0,3% sein.
- Die Bandgeschwindigkeit muss 4,76 cm/s ±2% betragen.
  Die Geschwindigkeit lässt sich mit Schraube B (Bild 11) einstellen.

Bei einem übermässigen Jaulwert müssen folgende Teile auf ihre richtige Arbeitsweise (Einstellung) kontrolliert werden

- Motor 132
- Andruckrolle 119
- Reibkupplungen 103
- Schwungräder 116, 137
- Seil 117
- Lager 113. Beim Auswechseln das neue Lager zuerst kurz "einlaufen" (Schwungrad ein wenig schräg einstecken und einige Umdrehungen schnell rotieren lassen.)
- Scheibe 104. Ist der Wert in der (üblichen) Wiedergabestellung zu hoch, so muss die vordere Scheibe ausgewechselt werden. Bei einem zu hohen Wert in der 'reverse'-Stellung ist die hintere Scheibe auszuwechseln.

5. Schwungrad 116,137

- Siehe Bild 14.

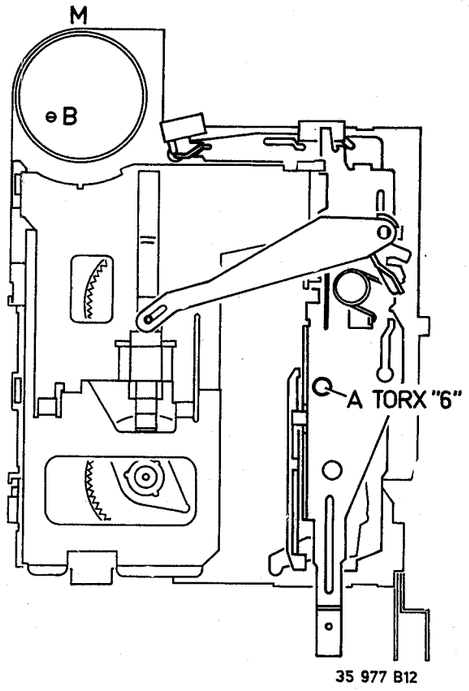


Fig. 11

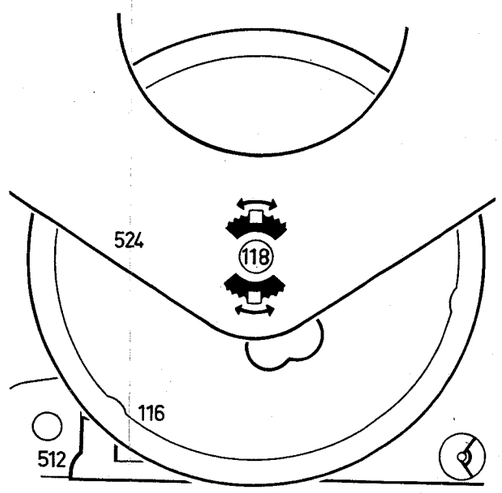
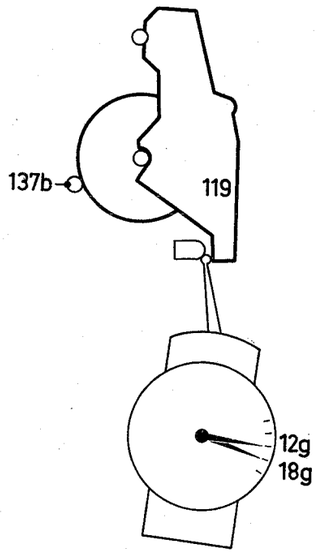


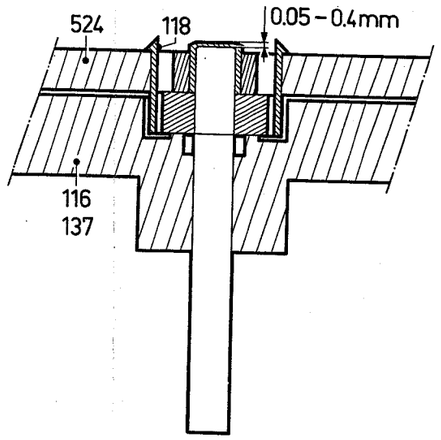
Fig. 12

35 978 A12



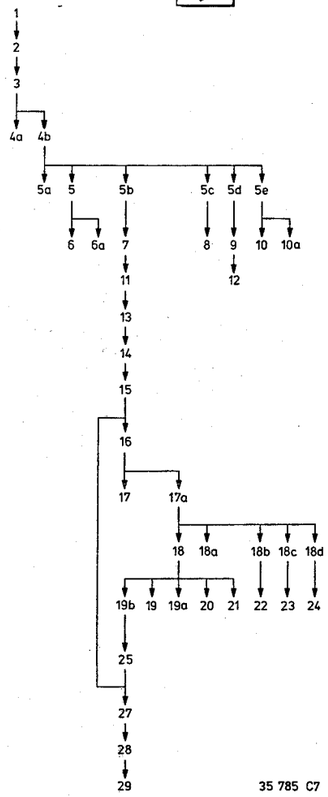
35 979 A12

Fig. 13



35 980 A12/B

Fig. 14



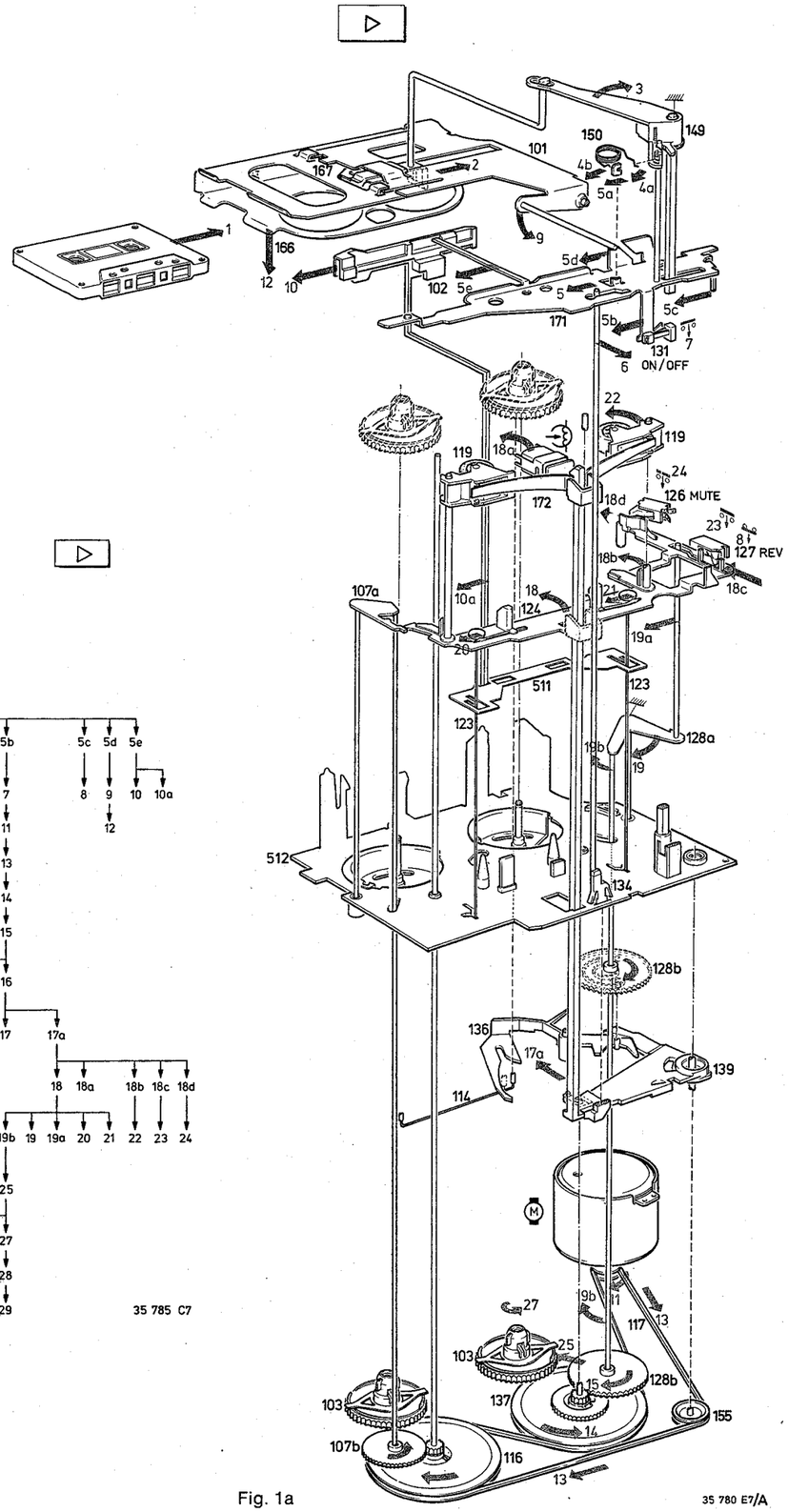
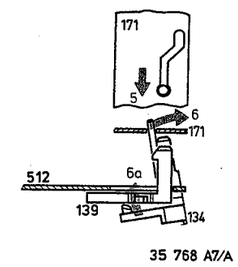


Fig. 1a

35 780 E7/A



35 768 A7/A

Fig. 1b

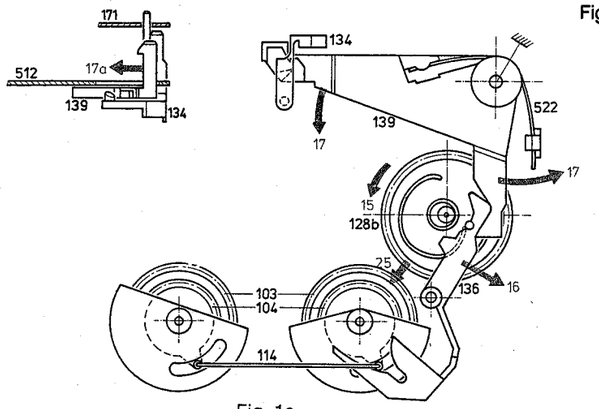
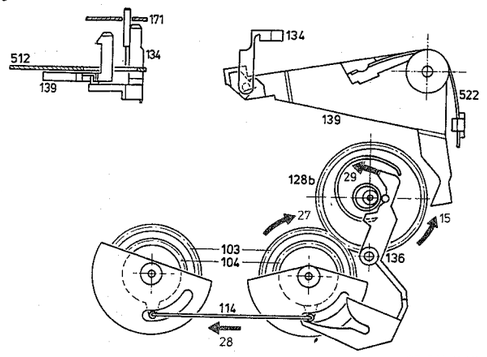


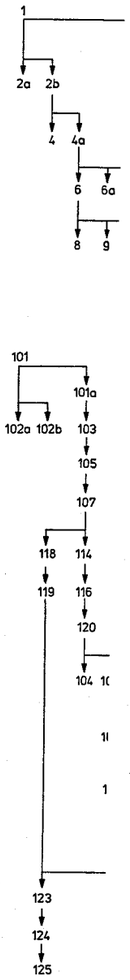
Fig. 1c

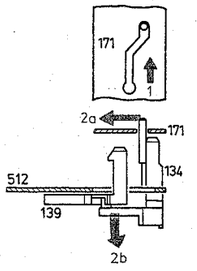
35 771 B7/A



35 777 B7/A

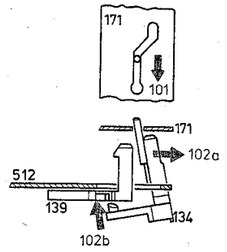
Fig. 1d





36 026 A7/A

Fig. 2b



35 767 A7/A

Fig. 2c

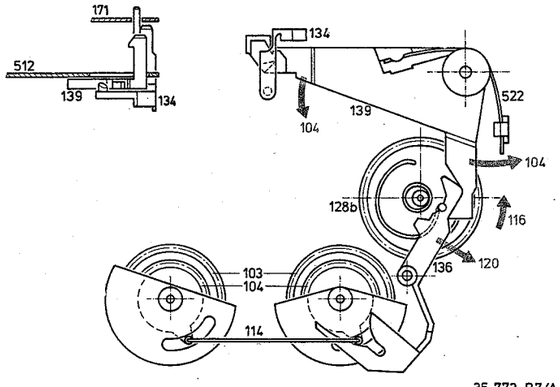


Fig. 2d

35 773 B7/A

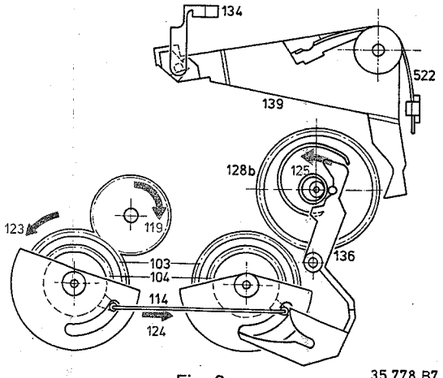
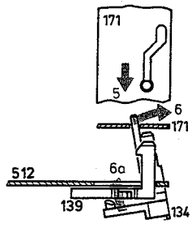


Fig. 2e

35 778 B7



35 768 A7/A

Fig. 1b

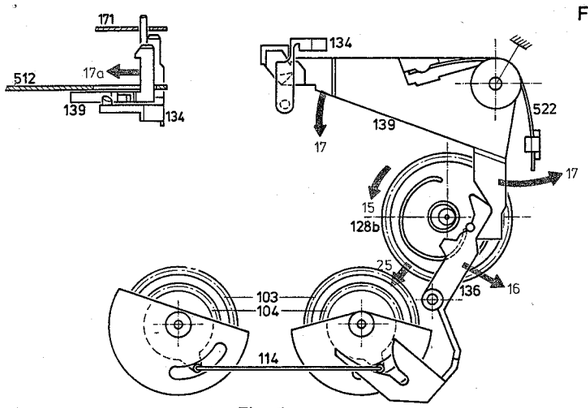
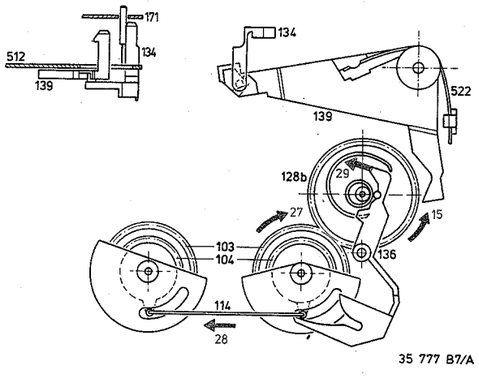


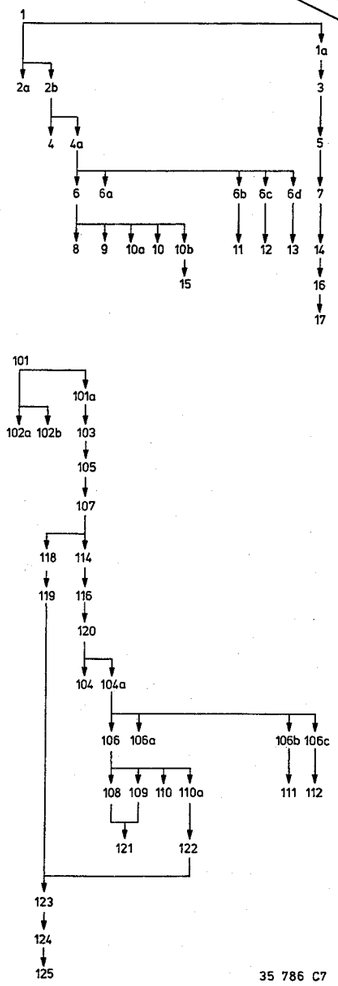
Fig. 1c

35 771 B7/A

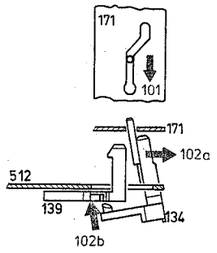


35 777 B7/A

Fig. 1d



35 786 C7

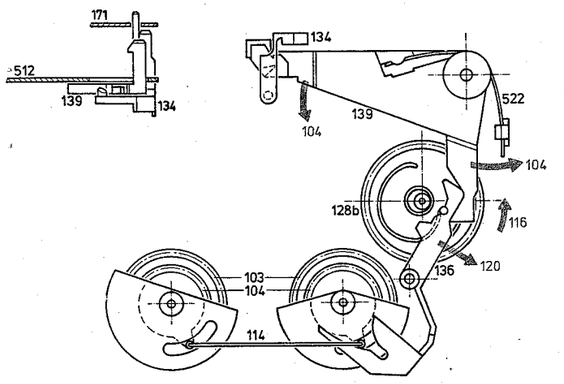


36 026 A7/A

Fig. 2b

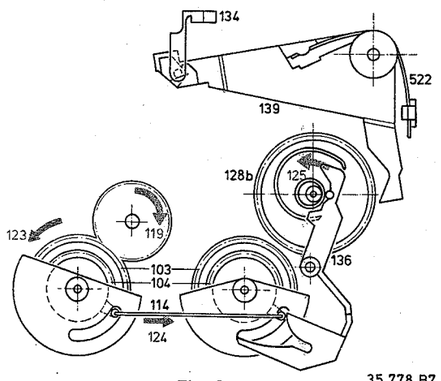
35 767 A7/A

Fig. 2c



35 773 B7/A

Fig. 2d



35 778 B7

Fig. 2e

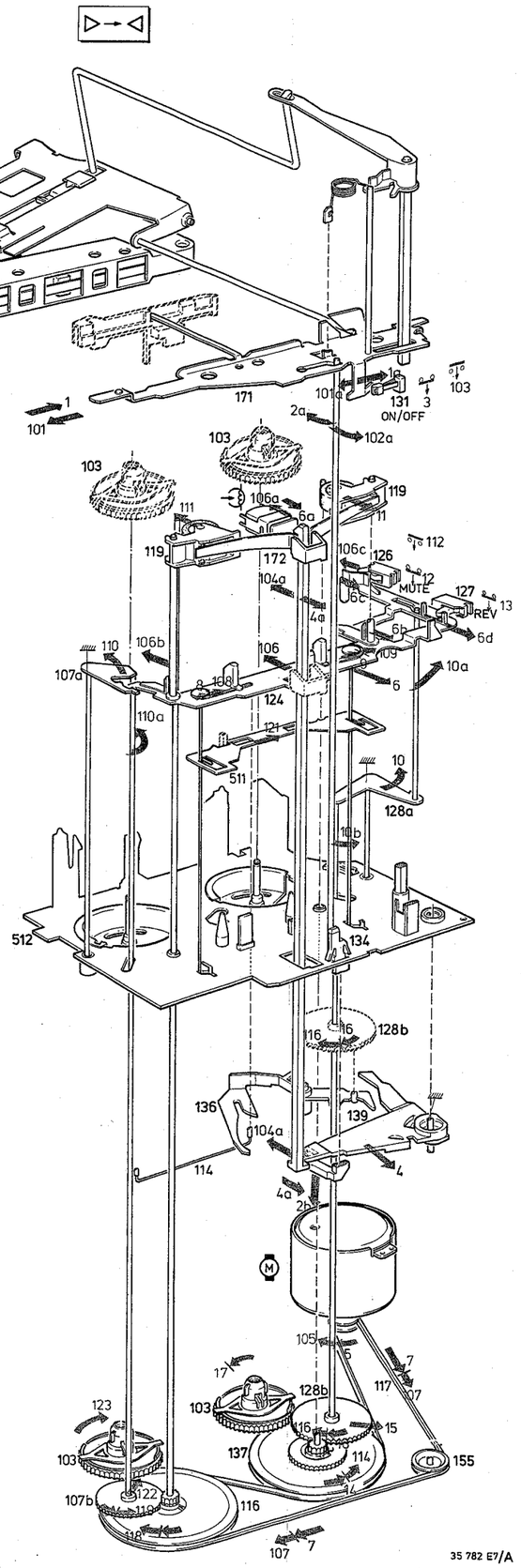
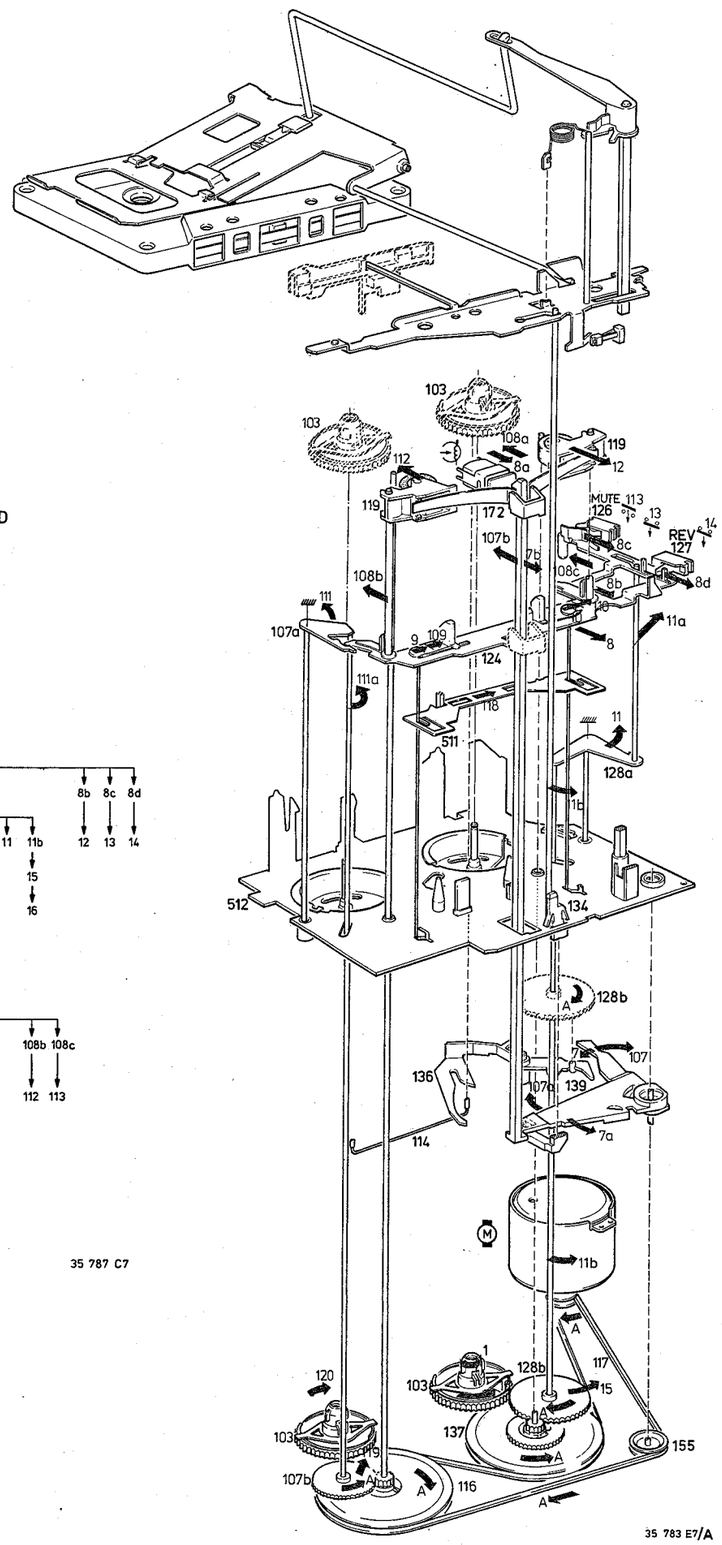


Fig. 2a

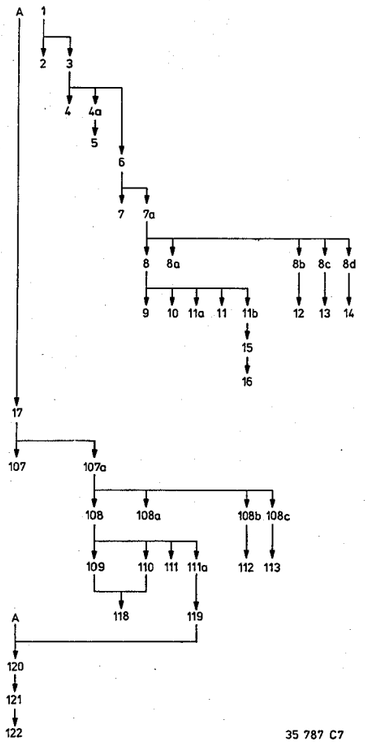
TAPE END



35 783 E7/A

Fig. 3a

TAPE END



35 787 C7

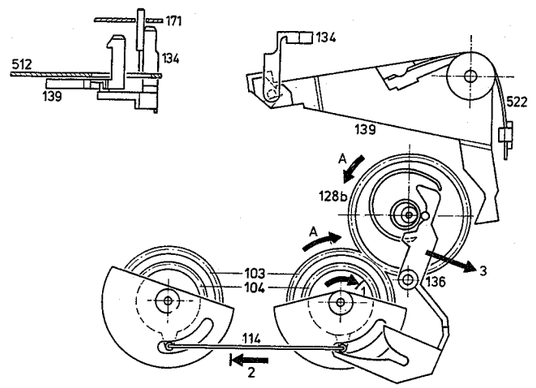


Fig. 3b 35 776 B7/A

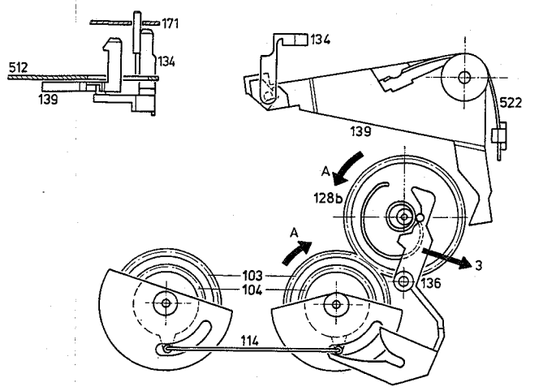


Fig. 3c 35 775 B7/A

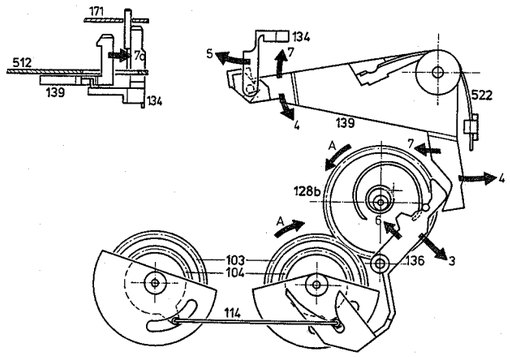


Fig. 3d 35 770 B7/A

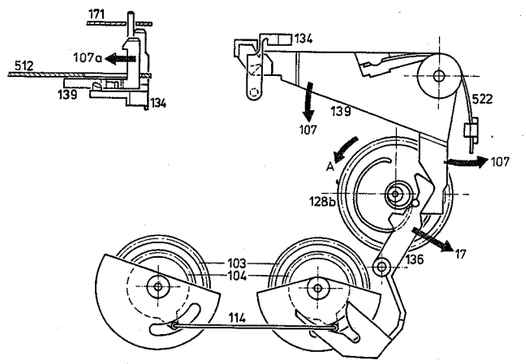


Fig. 3e 35 772 B7/A

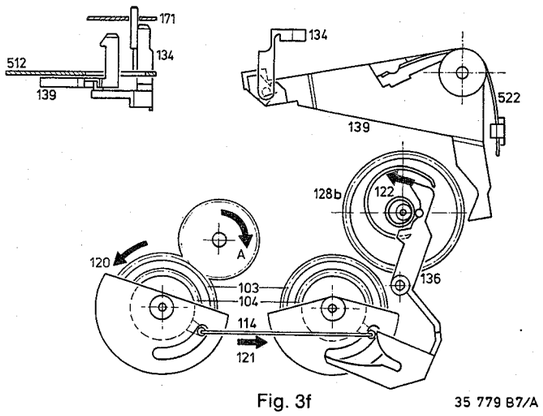


Fig. 3f 35 779 B7/A

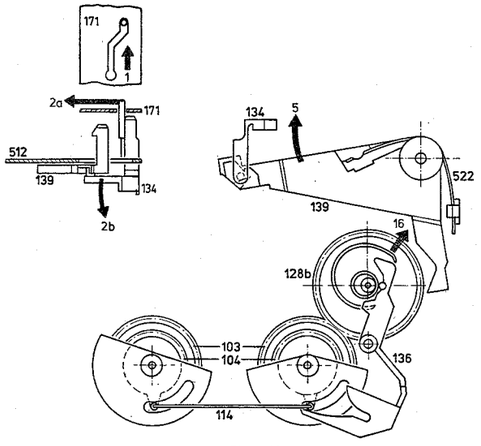
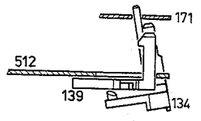
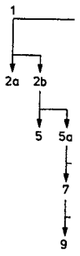


Fig. 4b 35 774 B7/B



35 769 A7/A

Fig. 4c



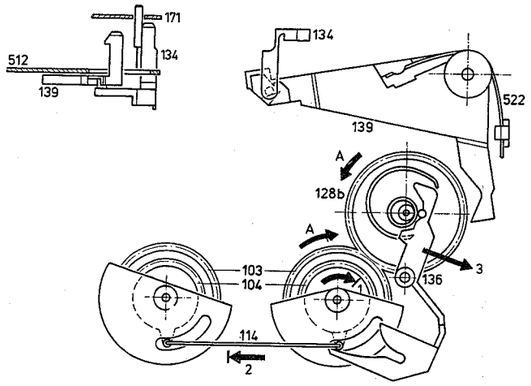


Fig. 3b 35 776 B7/A

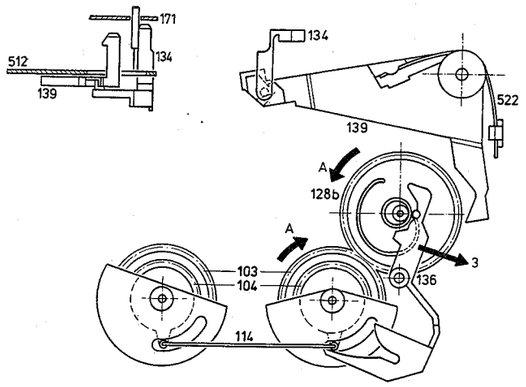


Fig. 3c 35 775 B7/A

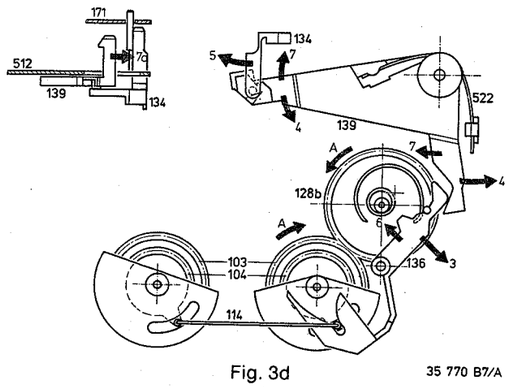


Fig. 3d 35 770 B7/A

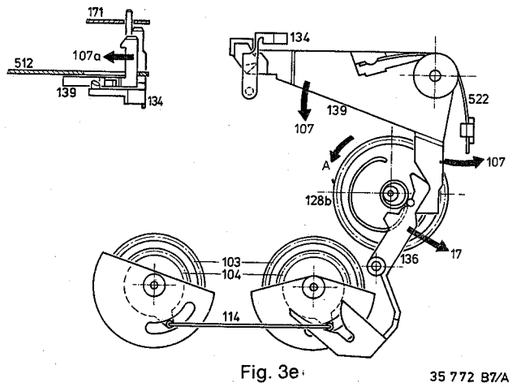


Fig. 3e 35 772 B7/A

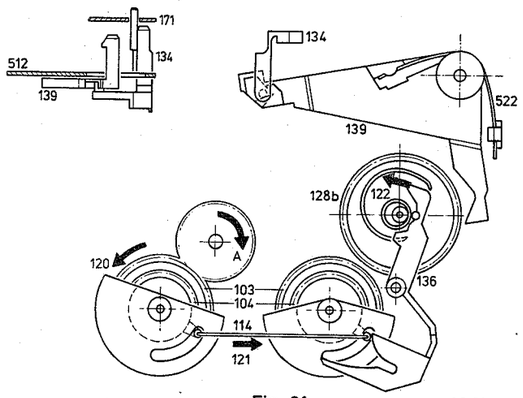


Fig. 3f 35 779 B7/A

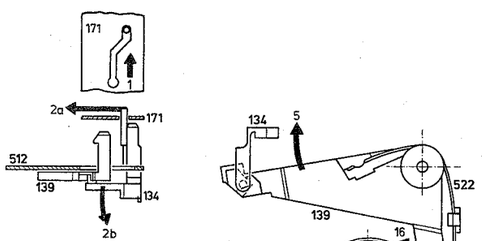
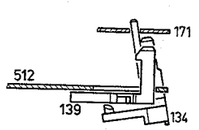
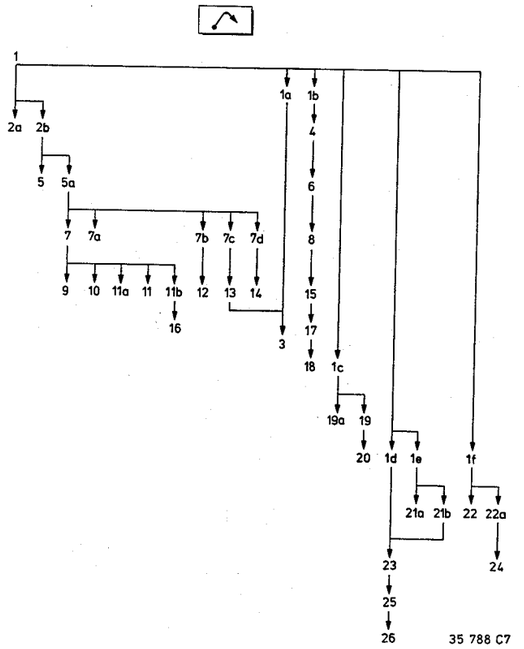


Fig. 4b 35 774 B7/B



35 769 A7/A

Fig. 4c



35 788 C7

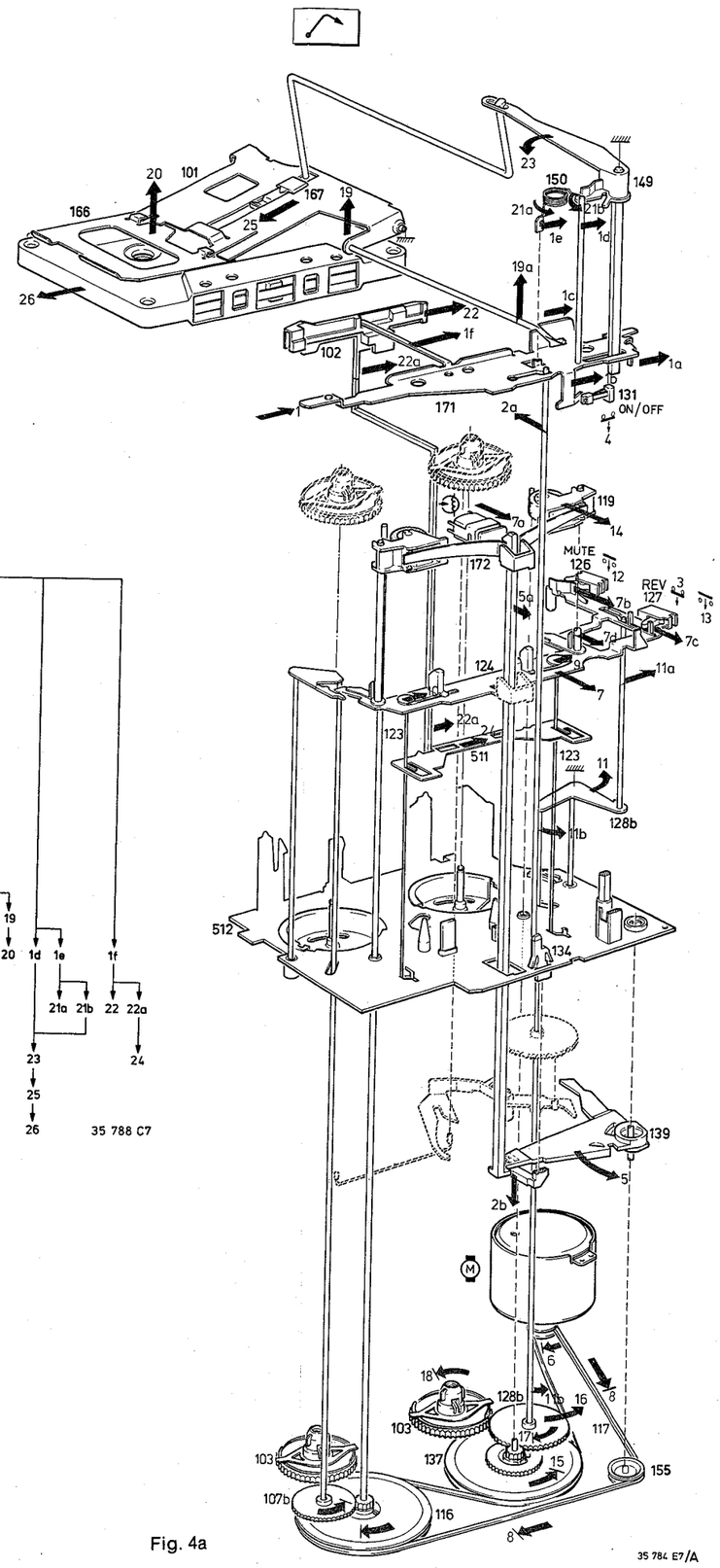
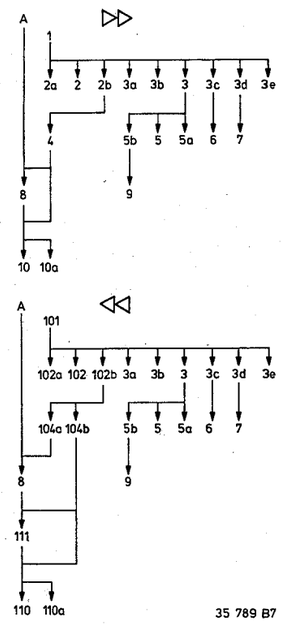


Fig. 4a

35 784 E7/A

CS 11 378



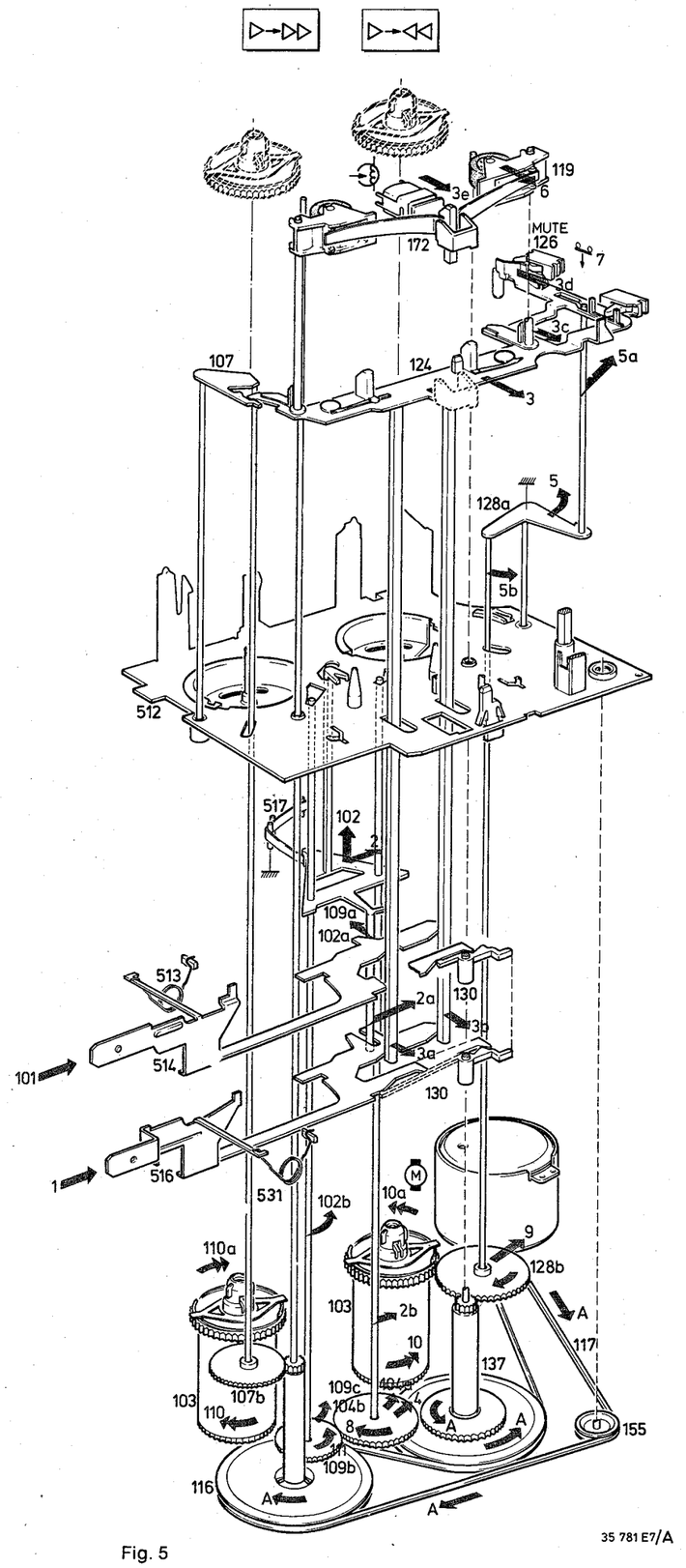
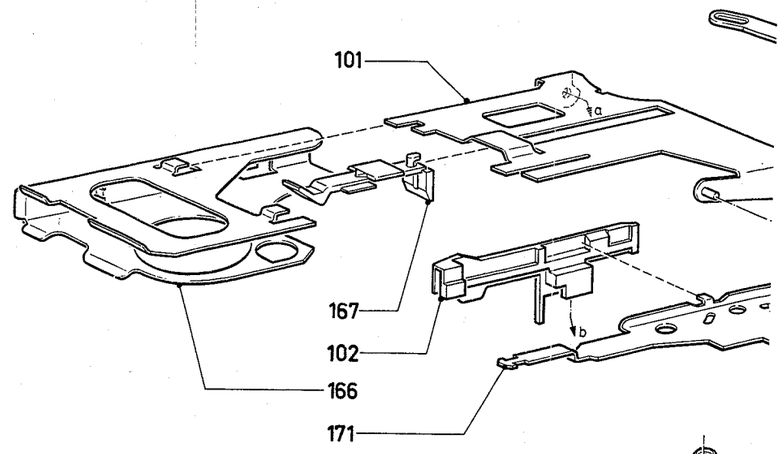
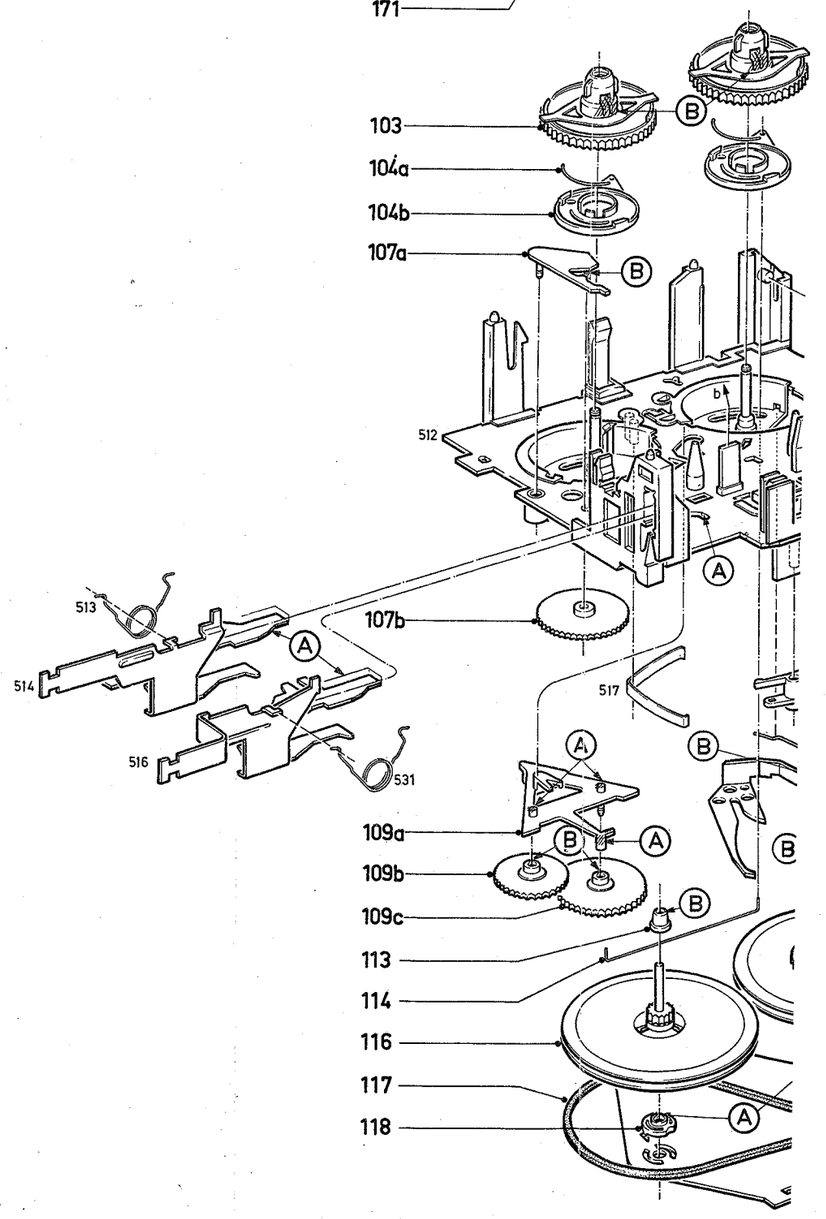


Fig. 5

A	4822 390 20128
B	4822 390 10107
D	4822 390 20116
101	4822 466 81479
102	4822 462 30242
103	4822 466 70526
104	4822 466 70527
107	4822 522 20325
109	4822 522 20327
113	4822 520 30406
114	4822 492 90076
116	4822 528 80985
117	4822 358 30405
118	4822 520 30407
119	4822 403 40157
122	4822 249 30117
123	4822 528 80983
124	4822 459 80209
126	4822 277 10749
127	4822 277 10748
128	4822 522 20326
130	4822 403 52509
131	4822 276 11291
132	4822 361 20487
133	4822 502 12548
134	4822 403 10225
135	4822 492 63217
136	4822 403 52031
137	4822 528 80984
139	4822 403 52029
149	4822 404 20568
150	4822 492 41275
155	4822 528 81144
166	4822 404 20593
167	4822 404 20585
168	4822 256 91254
171	4822 404 20951
172	4822 492 63216
173	4822 404 20952
174	4822 321 22596





A	4822 390 20128
B	4822 390 10107
D	4822 390 20116
101	4822 466 81479
102	4822 462 30242
103	4822 466 70526
104	4822 466 70527
107	4822 522 20325
109	4822 522 20327
113	4822 520 30406
114	4822 492 90076
116	4822 528 80985
117	4822 358 30405
118	4822 520 30407
119	4822 403 40157
122	4822 249 30117
123	4822 528 80983
124	4822 459 80209
126	4822 277 10749
127	4822 277 10748
128	4822 522 20326
130	4822 403 52509
131	4822 276 11291
132	4822 361 20487
133	4822 502 12548
134	4822 403 10225
135	4822 492 63217
136	4822 403 52031
137	4822 528 80984
139	4822 403 52029
149	4822 404 20568
150	4822 492 41275
155	4822 528 81144
166	4822 404 20593
167	4822 404 20585
168	4822 256 91254
171	4822 404 20951
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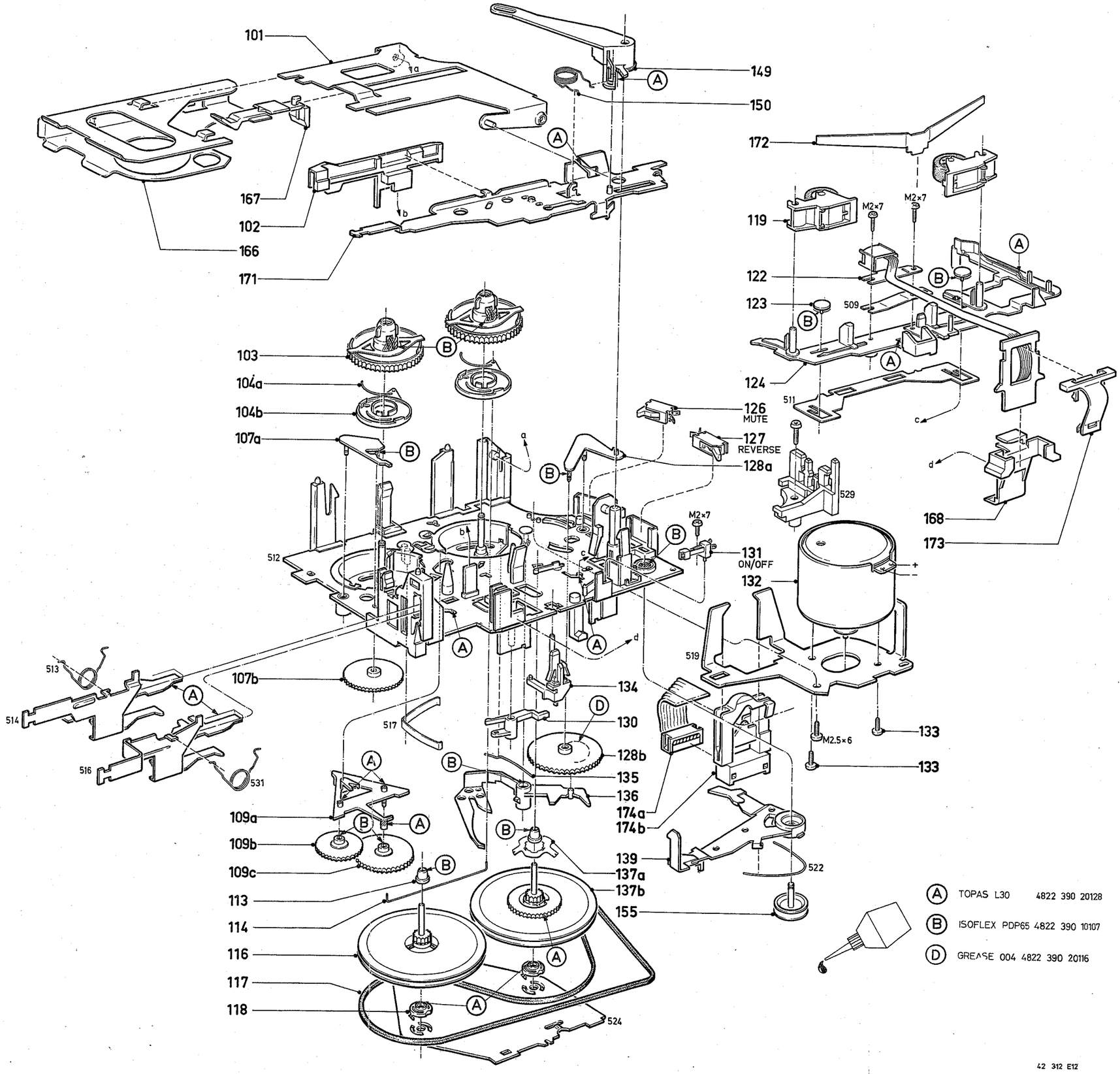
173	4822 404 20952
174	4822 321 22596



42 312 E12

BELT 117, FLY WHEELS 116, 137, COG WHEEL 107

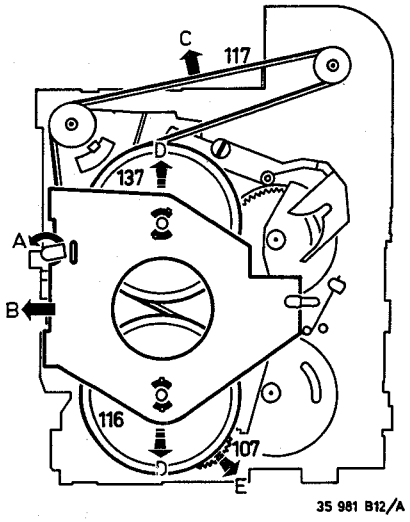


Fig. 6

PRESSURE ROLLER 119, HEAD 122

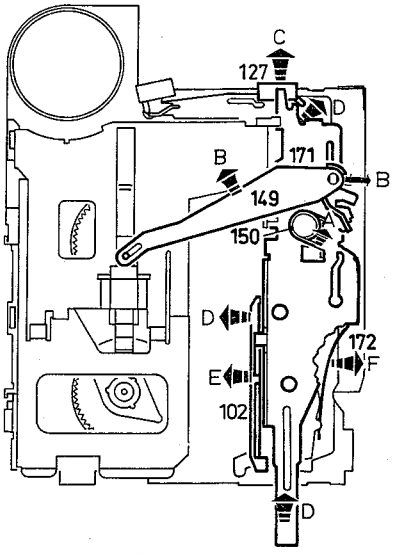


Fig. 7

HEAD BRACKET 124

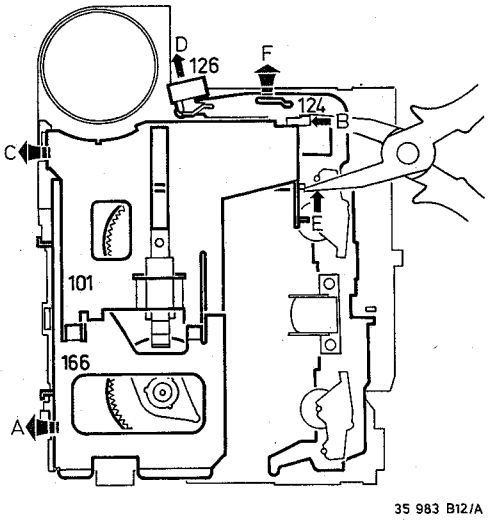


Fig. 8

CLUTCH 103

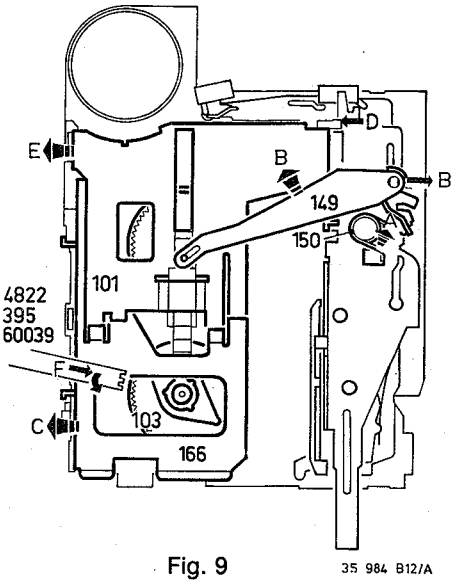


Fig. 9

35 984 B12/A

COG WHEELS 109, 128

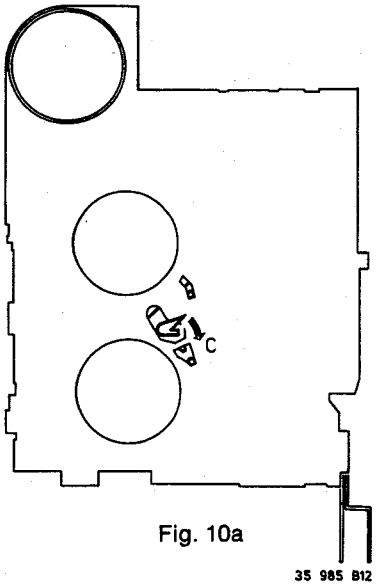


Fig. 10a

35 985 B12

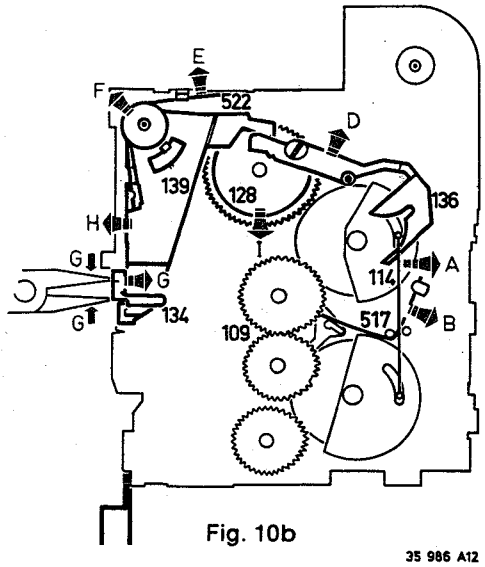
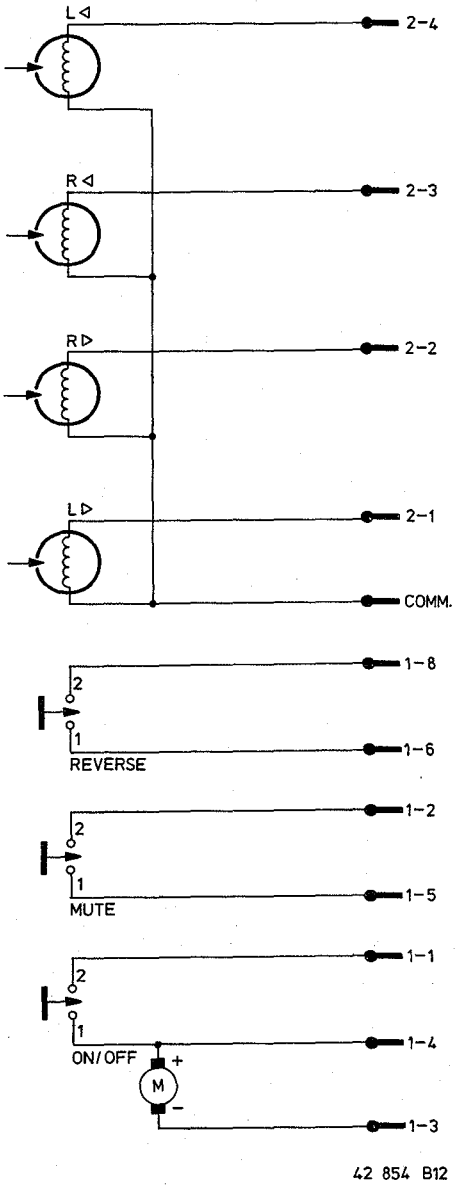
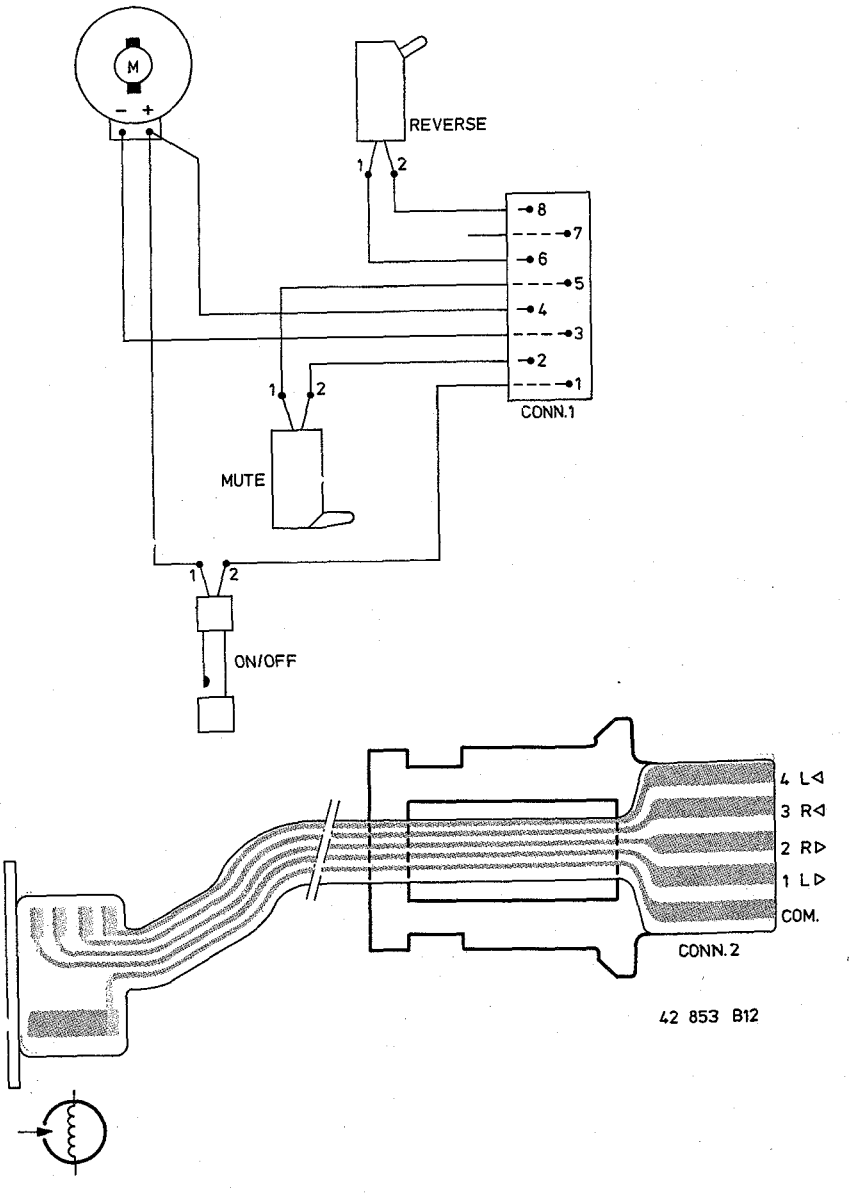


Fig. 10b

35 986 A12



42 854 B12



42 853 B12